

# ALMANAC LIX TRANSITS VISIBLE FROM PLUTO IN BCE

The almanac LIX contains a list of transits visible from Pluto from the 125th millennium BCE to the 1st millennium BCE.

During the period of 250 000 years, the total number of transits visible from Pluto is 40 790 transits visible from Pluto (29 011 transits of Mercury, 5 744 transits of Venus, 2 555 transits of Earth, 2 550 transits of Moon, 883 transits of Mars, 38 transits of Jupiter, 9 transits of Saturn).

## 125TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 125th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	-124998-04-13 03:08 J	-43933994.56	-43933994.37	-43933994.16	0.0082	0.0049		
Earth	-124998-04-13 06:01 J	-43933994.45	-43933994.25	-43933994.03	0.0082	0.0045	*	
Venus	-124993-09-09 07:56 J	-43932018.29	-43932018.17	-43932018.02	0.0079	0.0059		
Venus	-124992-04-22 16:35 J	-43931793.02	-43931792.81	-43931792.60	0.0079	0.0009		
Venus	-124992-12-04 00:15 J	-43931567.52	-43931567.49	-43931567.40	0.0078	0.0076		
Mercury	-124849-03-09 04:49 J	-43879606.37	-43879606.30	-43879606.20	0.0061	0.0053		
Mercury	-124849-06-05 06:01 J	-43879518.36	-43879518.25	-43879518.11	0.0061	0.0045		
Mercury	-124849-09-01 07:13 J	-43879430.33	-43879430.20	-43879430.03	0.0061	0.0037		
Mercury	-124849-11-28 08:39 J	-43879342.29	-43879342.14	-43879341.97	0.0061	0.0028		
Mercury	-124848-02-24 09:51 J	-43879254.25	-43879254.09	-43879253.90	0.0061	0.0020		
Mercury	-124848-05-23 11:18 J	-43879166.21	-43879166.03	-43879165.84	0.0061	0.0012		
Mercury	-124848-08-19 12:30 J	-43879078.16	-43879077.98	-43879077.79	0.0061	0.0004		
Mercury	-124848-11-15 13:42 J	-43878990.11	-43878989.93	-43878989.74	0.0061	0.0006		
Mercury	-124847-02-11 14:54 J	-43878902.05	-43878901.88	-43878901.69	0.0061	0.0014		
Mercury	-124847-05-10 16:20 J	-43878813.99	-43878813.82	-43878813.64	0.0061	0.0022		
Mercury	-124847-08-06 17:18 J	-43878725.93	-43878725.78	-43878725.60	0.0061	0.0030		
Mercury	-124847-11-02 18:30 J	-43878637.86	-43878637.73	-43878637.57	0.0061	0.0039		
Mercury	-124846-01-29 19:56 J	-43878549.78	-43878549.67	-43878549.54	0.0062	0.0047		
Mercury	-124846-04-27 20:54 J	-43878461.69	-43878461.63	-43878461.53	0.0062	0.0056		
Moon	-124842-10-20 14:54 J	-43876825.14	-43876824.88	-43876824.62	0.0063	0.0007		
Earth	-124842-10-20 16:20 J	-43876825.09	-43876824.82	-43876824.55	0.0063	0.0006	*	
Venus	-124834-09-22 20:39 J	-43873930.70	-43873930.64	-43873930.53	0.0066	0.0061		

Venus -124833-05-05 02:39 J -43873705.61 -43873705.39 -43873705.16 0.0066 0.0018

Venus -124833-12-16 08:11 J -43873480.36 -43873480.16 -43873479.93 0.0066 0.0025

Mercury -124757-10-09 12:44 J -43845789.03 -43845788.97 -43845788.91 0.0084 0.0075

Mercury -124756-01-05 13:56 J -43845701.01 -43845700.92 -43845700.81 0.0084 0.0059

Mercury -124756-04-03 15:23 J -43845612.97 -43845612.86 -43845612.73 0.0084 0.0042

Mercury -124756-06-30 16:49 J -43845524.92 -43845524.80 -43845524.66 0.0084 0.0026

Mercury -124756-09-26 18:15 J -43845436.87 -43845436.74 -43845436.60 0.0084 0.0010

Mercury -124756-12-23 19:42 J -43845348.82 -43845348.68 -43845348.54 0.0084 0.0007

Mercury -124755-03-21 21:08 J -43845260.75 -43845260.62 -43845260.49 0.0084 0.0023

Mercury -124755-06-17 22:20 J -43845172.69 -43845172.57 -43845172.44 0.0083 0.0039

Mercury -124755-09-13 23:47 J -43845084.61 -43845084.51 -43845084.40 0.0083 0.0054

Mercury -124755-12-11 00:59 J -43844996.52 -43844996.46 -43844996.38 0.0083 0.0071

Earth -124752-04-14 18:01 J -43844140.99 -43844140.75 -43844140.49 0.0082 0.0010

Moon -124752-04-14 20:39 J -43844140.88 -43844140.64 -43844140.39 0.0082 0.0011 \*

Venus -124747-10-08 23:47 J -43842137.70 -43842137.51 -43842137.29 0.0079 0.0023

Venus -124746-05-22 08:11 J -43841912.32 -43841912.16 -43841911.98 0.0078 0.0045

Mercury -124604-11-06 17:47 J -43789877.80 -43789877.76 -43789877.67 0.0061 0.0057

Mercury -124603-02-02 18:59 J -43789789.79 -43789789.71 -43789789.57 0.0061 0.0049

Mercury -124603-05-01 20:54 J -43789701.77 -43789701.63 -43789701.49 0.0061 0.0040

Mercury -124603-07-28 21:51 J -43789613.73 -43789613.59 -43789613.42 0.0061 0.0032

Mercury -124603-10-24 23:03 J -43789525.69 -43789525.54 -43789525.35 0.0061 0.0024

Mercury -124602-01-21 00:30 J -43789437.65 -43789437.48 -43789437.29 0.0061 0.0016

Mercury -124602-04-19 01:56 J -43789349.60 -43789349.42 -43789349.23 0.0061 0.0007

Mercury -124602-07-16 03:08 J -43789261.55 -43789261.37 -43789261.18 0.0061 0.0002

Mercury -124602-10-12 04:20 J -43789173.50 -43789173.32 -43789173.13 0.0061 0.0010

Mercury -124601-01-08 05:18 J -43789085.44 -43789085.28 -43789085.08 0.0061 0.0019

Mercury -124601-04-05 06:44 J -43788997.38 -43788997.22 -43788997.04 0.0061 0.0026

Mercury -124601-07-02 07:56 J -43788909.31 -43788909.17 -43788909.00 0.0061 0.0035

Mercury -124601-09-28 08:54 J -43788821.23 -43788821.13 -43788820.97 0.0061 0.0044

Mercury -124601-12-25 10:20 J -43788733.15 -43788733.07 -43788732.95 0.0062 0.0052

Mercury -124600-03-23 11:47 J -43788645.04 -43788645.01 -43788644.96 0.0062 0.0060

Earth -124596-10-21 22:35 J -43786971.83 -43786971.56 -43786971.29 0.0063 0.0006

Moon -124596-10-21 23:47 J -43786971.78 -43786971.51 -43786971.23 0.0063 0.0004 \*

Mars -124590-12-14 21:51 J -43784726.79 -43784726.59 -43784726.33 0.0065 0.0044

Venus -124588-10-21 08:39 J -43784050.29 -43784050.14 -43784049.93 0.0066 0.0040

Venus -124587-06-03 14:54 J -43783825.10 -43783824.88 -43783824.64 0.0066 0.0004

Venus -124586-01-14 20:11 J -43783599.79 -43783599.66 -43783599.47 0.0066 0.0048

Mercury -124511-06-09 02:54 J -43756060.38 -43756060.38 -43756060.35 0.0084 0.0084

Mercury -124511-09-05 04:20 J -43755972.39 -43755972.32 -43755972.22 0.0084 0.0067

Mercury -124511-12-02 06:01 J -43755884.36 -43755884.25 -43755884.14 0.0084 0.0051

Mercury -124510-02-28 07:27 J -43755796.32 -43755796.19 -43755796.07 0.0084 0.0034

Mercury -124510-05-27 08:54 J -43755708.27 -43755708.13 -43755708.00 0.0084 0.0018

Mercury -124510-08-23 10:06 J -43755620.21 -43755620.08 -43755619.94 0.0084 0.0003

Mercury -124510-11-19 11:32 J -43755532.15 -43755532.02 -43755531.88 0.0084 0.0014

Mercury -124509-02-15 12:59 J -43755444.09 -43755443.96 -43755443.83 0.0084 0.0030

Mercury -124509-05-13 13:56 J -43755356.02 -43755355.92 -43755355.79 0.0083 0.0047

Mercury -124509-08-09 15:37 J -43755267.94 -43755267.85 -43755267.76 0.0083 0.0062

Mercury -124509-11-05 17:03 J -43755179.84 -43755179.79 -43755179.74 0.0083 0.0077

Moon -124506-04-17 01:42 J -43754287.68 -43754287.43 -43754287.19 0.0082 0.0022

Earth -124506-04-17 04:35 J -43754287.56 -43754287.31 -43754287.07 0.0082 0.0018 \*

Mars -124502-06-28 02:25 J -43752754.65 -43752754.40 -43752754.13 0.0079 0.0047

Venus -124501-03-26 05:32 J -43752482.39 -43752482.27 -43752482.10 0.0079 0.0058

Venus -124501-11-06 14:25 J -43752257.10 -43752256.90 -43752256.68 0.0079 0.0011

Venus -124500-06-19 22:20 J -43752031.57 -43752031.57 -43752031.51 0.0078 0.0078

Mercury -124358-07-07 07:56 J -43700149.20 -43700149.17 -43700149.10 0.0061 0.0058

Mercury -124358-10-03 09:08 J -43700061.20 -43700061.12 -43700060.99 0.0061 0.0050

Mercury -124358-12-30 10:20 J -43699973.18 -43699973.07 -43699972.91 0.0061 0.0042

Mercury -124357-03-27 12:01 J -43699885.15 -43699885.00 -43699884.84 0.0061 0.0033

Mercury -124357-06-23 13:13 J -43699797.11 -43699796.95 -43699796.77 0.0061 0.0025

Mercury -124357-09-19 14:25 J -43699709.07 -43699708.90 -43699708.71 0.0061 0.0017

Mercury -124357-12-16 15:37 J -43699621.02 -43699620.85 -43699620.65 0.0061 0.0009  
 Mercury -124356-03-14 17:03 J -43699532.97 -43699532.79 -43699532.60 0.0061 0.0001  
 Mercury -124356-06-10 18:15 J -43699444.92 -43699444.74 -43699444.55 0.0061 0.0008  
 Mercury -124356-09-06 19:27 J -43699356.86 -43699356.69 -43699356.50 0.0061 0.0017  
 Mercury -124356-12-03 20:54 J -43699268.80 -43699268.63 -43699268.46 0.0061 0.0025  
 Mercury -124355-03-01 21:51 J -43699180.73 -43699180.59 -43699180.42 0.0061 0.0034  
 Mercury -124355-05-28 23:03 J -43699092.66 -43699092.54 -43699092.39 0.0061 0.0042  
 Mercury -124355-08-25 00:01 J -43699004.58 -43699004.50 -43699004.36 0.0062 0.0051  
 Mercury -124355-11-21 01:27 J -43698916.47 -43698916.44 -43698916.36 0.0062 0.0059  
 Earth -124351-10-22 17:32 J -43697484.89 -43697484.77 -43697484.59 0.0063 0.0052  
 Moon -124351-10-22 21:37 J -43697484.74 -43697484.60 -43697484.43 0.0063 0.0051 \*  
 Moon -124350-10-24 03:37 J -43697118.57 -43697118.35 -43697118.09 0.0063 0.0026  
 Earth -124350-10-24 06:44 J -43697118.44 -43697118.22 -43697117.95 0.0063 0.0026 \*  
 Mars -124343-05-07 21:23 J -43694730.75 -43694730.61 -43694730.41 0.0066 0.0055  
 Venus -124342-04-08 17:03 J -43694394.89 -43694394.79 -43694394.64 0.0066 0.0055  
 Venus -124342-11-19 23:03 J -43694169.76 -43694169.54 -43694169.30 0.0066 0.0012  
 Venus -124341-07-02 05:03 J -43693944.49 -43693944.29 -43693944.09 0.0066 0.0032  
 Mercury -124265-05-04 19:56 J -43666243.75 -43666243.67 -43666243.59 0.0084 0.0069  
 Mercury -124265-07-31 21:23 J -43666155.72 -43666155.61 -43666155.50 0.0084 0.0052  
 Mercury -124265-10-27 22:35 J -43666067.68 -43666067.56 -43666067.43 0.0084 0.0036  
 Mercury -124264-01-24 00:01 J -43665979.63 -43665979.50 -43665979.36 0.0084 0.0020  
 Mercury -124264-04-22 01:27 J -43665891.58 -43665891.44 -43665891.30 0.0084 0.0004  
 Mercury -124264-07-19 02:54 J -43665803.52 -43665803.38 -43665803.24 0.0084 0.0012  
 Mercury -124264-10-15 04:06 J -43665715.45 -43665715.33 -43665715.19 0.0083 0.0028  
 Mercury -124263-01-11 05:18 J -43665627.38 -43665627.28 -43665627.15 0.0083 0.0045  
 Mercury -124263-04-09 06:59 J -43665539.30 -43665539.21 -43665539.11 0.0083 0.0060  
 Mercury -124263-07-06 08:11 J -43665451.21 -43665451.16 -43665451.09 0.0083 0.0076  
 Earth -124260-04-18 18:59 J -43664433.85 -43664433.71 -43664433.53 0.0082 0.0062  
 Moon -124260-04-18 18:44 J -43664433.84 -43664433.72 -43664433.55 0.0082 0.0066 \*  
 Venus -124255-04-24 23:18 J -43662601.74 -43662601.53 -43662601.32 0.0079 0.0014

Venus -124255-12-06 07:13 J -43662376.33 -43662376.20 -43662376.03 0.0078 0.0054  
 Mercury -124112-06-01 22:20 J -43610332.63 -43610332.57 -43610332.46 0.0061 0.0054  
 Mercury -124112-08-29 00:01 J -43610244.62 -43610244.50 -43610244.37 0.0061 0.0045  
 Mercury -124112-11-25 01:13 J -43610156.59 -43610156.45 -43610156.29 0.0061 0.0037  
 Mercury -124111-02-21 02:25 J -43610068.55 -43610068.40 -43610068.22 0.0061 0.0029  
 Mercury -124111-05-20 03:37 J -43609980.51 -43609980.35 -43609980.16 0.0061 0.0021  
 Mercury -124111-08-16 05:18 J -43609892.47 -43609892.28 -43609892.10 0.0061 0.0012  
 Mercury -124111-11-12 06:30 J -43609804.42 -43609804.23 -43609804.05 0.0061 0.0004  
 Mercury -124110-02-08 07:42 J -43609716.36 -43609716.18 -43609715.99 0.0061 0.0004  
 Mercury -124110-05-07 08:54 J -43609628.31 -43609628.13 -43609627.94 0.0061 0.0013  
 Mercury -124110-08-03 09:51 J -43609540.25 -43609540.09 -43609539.90 0.0061 0.0021  
 Mercury -124110-10-30 11:03 J -43609452.18 -43609452.04 -43609451.86 0.0061 0.0030  
 Mercury -124109-01-26 12:30 J -43609364.11 -43609363.98 -43609363.82 0.0061 0.0038  
 Mercury -124109-04-23 13:27 J -43609276.04 -43609275.94 -43609275.79 0.0061 0.0047  
 Mercury -124109-07-20 14:54 J -43609187.95 -43609187.88 -43609187.78 0.0062 0.0055  
 Moon -124105-10-23 21:23 J -43607631.79 -43607631.61 -43607631.37 0.0063 0.0041  
 Earth -124105-10-24 00:01 J -43607631.70 -43607631.50 -43607631.28 0.0063 0.0039 \*  
 Earth -124104-10-25 12:44 J -43607265.16 -43607264.97 -43607264.74 0.0063 0.0038  
 Moon -124104-10-25 15:51 J -43607265.03 -43607264.84 -43607264.63 0.0063 0.0040 \*  
 Venus -124096-05-07 05:47 J -43604514.46 -43604514.26 -43604514.06 0.0066 0.0033  
 Venus -124096-12-18 11:18 J -43604289.25 -43604289.03 -43604288.80 0.0066 0.0010  
 Venus -124095-07-31 17:03 J -43604063.91 -43604063.79 -43604063.64 0.0066 0.0054  
 Mercury -124019-01-02 10:20 J -43576515.12 -43576515.07 -43576515.01 0.0084 0.0078  
 Mercury -124019-03-31 11:32 J -43576427.10 -43576427.02 -43576426.91 0.0084 0.0062  
 Mercury -124019-06-27 12:59 J -43576339.07 -43576338.96 -43576338.83 0.0084 0.0045  
 Mercury -124019-09-23 14:25 J -43576251.02 -43576250.90 -43576250.76 0.0084 0.0029  
 Mercury -124019-12-20 15:51 J -43576162.97 -43576162.84 -43576162.70 0.0084 0.0013  
 Mercury -124018-03-18 17:18 J -43576074.92 -43576074.78 -43576074.64 0.0084 0.0003  
 Mercury -124018-06-14 18:30 J -43575986.86 -43575986.73 -43575986.59 0.0084 0.0020  
 Mercury -124018-09-10 19:56 J -43575898.79 -43575898.67 -43575898.54 0.0083 0.0035

Mercury -124018-12-07 21:08 J -43575810.72 -43575810.62 -43575810.50 0.0083 0.0051

Mercury -124017-03-04 22:49 J -43575722.63 -43575722.55 -43575722.47 0.0083 0.0067

Mercury -124017-06-01 00:01 J -43575634.51 -43575634.50 -43575634.48 0.0083 0.0082

Moon -124015-04-18 21:37 J -43574947.68 -43574947.60 -43574947.46 0.0082 0.0073

Earth -124015-04-19 01:27 J -43574947.56 -43574947.44 -43574947.31 0.0082 0.0070 \*

Venus -124010-10-11 05:18 J -43572946.43 -43572946.28 -43572946.10 0.0079 0.0049

Venus -124009-05-23 13:56 J -43572721.12 -43572720.92 -43572720.71 0.0079 0.0020

# 124TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 124th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-123866-01-30 11:47 J	-43520604.05	-43520604.01	-43520603.92	0.0061	0.0057		
Mercury	-123866-04-28 12:59 J	-43520516.05	-43520515.96	-43520515.82	0.0061	0.0049		
Mercury	-123866-07-25 14:11 J	-43520428.02	-43520427.91	-43520427.74	0.0061	0.0041		
Mercury	-123866-10-21 15:51 J	-43520339.99	-43520339.84	-43520339.67	0.0061	0.0032		
Mercury	-123865-01-17 17:03 J	-43520251.95	-43520251.79	-43520251.61	0.0061	0.0024		
Mercury	-123865-04-14 18:30 J	-43520163.90	-43520163.73	-43520163.54	0.0061	0.0016		
Mercury	-123865-07-11 19:56 J	-43520075.86	-43520075.67	-43520075.49	0.0061	0.0007		
Mercury	-123865-10-07 21:08 J	-43519987.80	-43519987.62	-43519987.43	0.0061	0.0001		
Mercury	-123864-01-03 22:20 J	-43519899.75	-43519899.57	-43519899.38	0.0061	0.0009		
Mercury	-123864-04-01 23:32 J	-43519811.69	-43519811.52	-43519811.33	0.0061	0.0018		

Mercury -123864-06-29 00:59 J -43519723.63 -43519723.46 -43519723.29 0.0061 0.0026

Mercury -123864-09-25 01:56 J -43519635.56 -43519635.42 -43519635.25 0.0061 0.0034

Mercury -123864-12-22 03:08 J -43519547.49 -43519547.37 -43519547.22 0.0061 0.0043

Mercury -123863-03-20 04:49 J -43519459.40 -43519459.30 -43519459.20 0.0062 0.0051

Mercury -123863-06-16 05:32 J -43519371.29 -43519371.27 -43519371.20 0.0062 0.0060

Moon -123859-10-26 04:35 J -43517778.52 -43517778.31 -43517778.06 0.0063 0.0029

Earth -123859-10-26 06:15 J -43517778.47 -43517778.24 -43517777.98 0.0063 0.0026 \*

Earth -123858-10-27 19:13 J -43517411.84 -43517411.70 -43517411.53 0.0063 0.0052

Moon -123858-10-27 18:59 J -43517411.82 -43517411.71 -43517411.53 0.0063 0.0054 \*

Mars -123852-03-31 03:37 J -43515430.59 -43515430.35 -43515430.04 0.0065 0.0031

Venus -123851-10-23 12:30 J -43514859.10 -43514858.98 -43514858.83 0.0066 0.0053

Venus -123850-06-05 18:15 J -43514633.96 -43514633.74 -43514633.51 0.0066 0.0010

Venus -123849-01-16 23:47 J -43514408.70 -43514408.51 -43514408.30 0.0066 0.0034

Mercury -123774-09-02 00:59 J -43486786.46 -43486786.46 -43486786.45 0.0084 0.0084

Mercury -123774-11-29 02:11 J -43486698.48 -43486698.41 -43486698.32 0.0084 0.0068

Mercury -123773-02-25 03:51 J -43486610.45 -43486610.34 -43486610.23 0.0084 0.0052

Mercury -123773-05-23 05:18 J -43486522.40 -43486522.28 -43486522.16 0.0084 0.0036

Mercury -123773-08-19 06:30 J -43486434.36 -43486434.23 -43486434.09 0.0084 0.0020

Mercury -123773-11-15 07:56 J -43486346.30 -43486346.17 -43486346.03 0.0084 0.0004

Mercury -123772-02-11 09:23 J -43486258.25 -43486258.11 -43486257.97 0.0084 0.0013

Mercury -123772-05-10 10:35 J -43486170.18 -43486170.06 -43486169.92 0.0084 0.0029

Mercury -123772-08-06 12:01 J -43486082.11 -43486082.00 -43486081.88 0.0083 0.0044

Mercury -123772-11-02 13:13 J -43485994.03 -43485993.95 -43485993.84 0.0083 0.0060

Mercury -123771-01-29 14:54 J -43485905.94 -43485905.88 -43485905.83 0.0083 0.0076

Earth -123769-04-20 12:44 J -43485094.19 -43485093.97 -43485093.74 0.0082 0.0037

Moon -123769-04-20 13:56 J -43485094.12 -43485093.92 -43485093.69 0.0082 0.0038 \*

Mars -123765-10-11 15:51 J -43483458.98 -43483458.84 -43483458.68 0.0079 0.0070

Venus -123764-11-08 20:54 J -43483065.83 -43483065.63 -43483065.41 0.0079 0.0012

Venus -123763-06-22 05:32 J -43482840.42 -43482840.27 -43482840.12 0.0078 0.0056

Mercury -123621-12-26 01:42 J -43430787.49 -43430787.43 -43430787.33 0.0061 0.0055



Mercury -123620-03-24 02:54 J -43430699.48 -43430699.38 -43430699.24 0.0061 0.0047

Mercury -123620-06-20 04:06 J -43430611.45 -43430611.33 -43430611.16 0.0061 0.0039

Mercury -123620-09-16 05:32 J -43430523.42 -43430523.27 -43430523.09 0.0061 0.0031

Mercury -123620-12-13 06:58 J -43430435.38 -43430435.21 -43430435.03 0.0061 0.0022

Mercury -123619-03-11 08:10 J -43430347.33 -43430347.16 -43430346.97 0.0061 0.0014

Mercury -123619-06-07 09:37 J -43430259.28 -43430259.10 -43430258.91 0.0061 0.0006

Mercury -123619-09-03 10:49 J -43430171.23 -43430171.05 -43430170.86 0.0061 0.0003

Mercury -123619-11-30 12:01 J -43430083.17 -43430083.00 -43430082.81 0.0061 0.0011

Mercury -123618-02-26 13:13 J -43429995.11 -43429994.95 -43429994.76 0.0061 0.0020

Mercury -123618-05-25 14:39 J -43429907.05 -43429906.89 -43429906.72 0.0061 0.0028

Mercury -123618-08-21 15:37 J -43429818.98 -43429818.85 -43429818.68 0.0061 0.0036

Mercury -123618-11-17 16:49 J -43429730.91 -43429730.80 -43429730.65 0.0061 0.0045

Mercury -123617-02-13 18:15 J -43429642.82 -43429642.74 -43429642.63 0.0061 0.0053

Mercury -123617-05-11 19:27 J -43429554.69 -43429554.69 -43429554.65 0.0062 0.0061

Earth -123613-10-27 09:22 J -43427925.35 -43427925.11 -43427924.84 0.0063 0.0020

Moon -123613-10-27 13:13 J -43427925.18 -43427924.95 -43427924.69 0.0063 0.0023 \*

Moon -123612-10-28 18:30 J -43427558.76 -43427558.73 -43427558.62 0.0063 0.0062

Earth -123612-10-28 22:20 J -43427558.66 -43427558.57 -43427558.44 0.0063 0.0058 \*

Mars -123606-08-22 17:32 J -43425434.95 -43425434.77 -43425434.50 0.0065 0.0046

Venus -123605-11-20 22:49 J -43424978.74 -43424978.55 -43424978.36 0.0066 0.0037

Venus -123604-07-04 04:20 J -43424753.54 -43424753.32 -43424753.08 0.0066 0.0006

Venus -123603-02-14 10:06 J -43424528.22 -43424528.08 -43424527.92 0.0066 0.0050

Mercury -123528-10-24 17:03 J -43396881.86 -43396881.79 -43396881.70 0.0084 0.0069

Mercury -123527-01-20 18:30 J -43396793.83 -43396793.73 -43396793.61 0.0084 0.0052

Mercury -123527-04-18 19:56 J -43396705.79 -43396705.67 -43396705.54 0.0084 0.0036

Mercury -123527-07-15 21:22 J -43396617.74 -43396617.61 -43396617.47 0.0084 0.0020

Mercury -123527-10-11 22:49 J -43396529.69 -43396529.55 -43396529.41 0.0084 0.0004

Mercury -123526-01-08 00:15 J -43396441.63 -43396441.49 -43396441.35 0.0084 0.0012

Mercury -123526-04-06 01:27 J -43396353.56 -43396353.44 -43396353.30 0.0084 0.0028

Mercury -123526-07-03 02:54 J -43396265.50 -43396265.38 -43396265.26 0.0083 0.0044

Mercury -123526-09-29 04:06 J -43396177.42 -43396177.33 -43396177.23 0.0083 0.0060

Mercury -123526-12-26 05:18 J -43396089.32 -43396089.28 -43396089.21 0.0083 0.0075

Earth -123523-04-22 17:32 J -43395240.99 -43395240.77 -43395240.52 0.0082 0.0029

Moon -123523-04-22 20:25 J -43395240.88 -43395240.65 -43395240.40 0.0082 0.0028 \*

Venus -123518-04-27 00:01 J -43393410.63 -43393410.50 -43393410.36 0.0079 0.0059

Venus -123518-12-08 08:25 J -43393185.35 -43393185.15 -43393184.93 0.0079 0.0010

Venus -123517-07-20 16:49 J -43392959.83 -43392959.80 -43392959.75 0.0078 0.0077

Mercury -123375-08-25 14:54 J -43341058.91 -43341058.88 -43341058.81 0.0061 0.0059

Mercury -123375-11-21 16:06 J -43340970.91 -43340970.83 -43340970.70 0.0061 0.0051

Mercury -123374-02-17 17:46 J -43340882.89 -43340882.76 -43340882.62 0.0061 0.0042

Mercury -123374-05-16 18:58 J -43340794.86 -43340794.71 -43340794.55 0.0061 0.0034

Mercury -123374-08-12 20:10 J -43340706.82 -43340706.66 -43340706.48 0.0061 0.0026

Mercury -123374-11-08 21:22 J -43340618.78 -43340618.61 -43340618.42 0.0061 0.0018

Mercury -123373-02-04 22:49 J -43340530.73 -43340530.55 -43340530.36 0.0061 0.0010

Mercury -123373-05-03 00:15 J -43340442.68 -43340442.49 -43340442.30 0.0061 0.0001

Mercury -123373-07-30 01:27 J -43340354.62 -43340354.44 -43340354.25 0.0061 0.0007

Mercury -123373-10-26 02:39 J -43340266.57 -43340266.39 -43340266.21 0.0061 0.0015

Mercury -123372-01-22 04:06 J -43340178.50 -43340178.33 -43340178.16 0.0061 0.0024

Mercury -123372-04-20 04:49 J -43340090.44 -43340090.30 -43340090.12 0.0061 0.0033

Mercury -123372-07-17 06:15 J -43340002.36 -43340002.24 -43340002.09 0.0061 0.0041

Mercury -123372-10-13 07:42 J -43339914.28 -43339914.18 -43339914.06 0.0061 0.0049

Mercury -123371-01-09 08:39 J -43339826.18 -43339826.14 -43339826.05 0.0062 0.0058

Earth -123367-10-29 15:51 J -43338072.10 -43338071.84 -43338071.56 0.0063 0.0007

Moon -123367-10-29 16:06 J -43338072.10 -43338071.83 -43338071.55 0.0063 0.0010 \*

Venus -123359-05-09 04:49 J -43335323.38 -43335323.30 -43335323.16 0.0066 0.0058

Venus -123359-12-20 11:03 J -43335098.26 -43335098.04 -43335097.81 0.0066 0.0014

Venus -123358-08-02 16:34 J -43334873.00 -43334872.81 -43334872.59 0.0066 0.0030

Mercury -123282-06-24 07:42 J -43307153.23 -43307153.18 -43307153.13 0.0084 0.0078

Mercury -123282-09-20 08:54 J -43307065.22 -43307065.13 -43307065.03 0.0084 0.0062

Mercury -123282-12-17 10:20 J -43306977.18 -43306977.07 -43306976.95 0.0084 0.0046

Mercury -123281-03-14 11:46 J -43306889.14 -43306889.01 -43306888.88 0.0084 0.0029  
 Mercury -123281-06-10 12:58 J -43306801.09 -43306800.96 -43306800.82 0.0084 0.0014  
 Mercury -123281-09-06 14:25 J -43306713.03 -43306712.90 -43306712.76 0.0084 0.0004  
 Mercury -123281-12-03 15:51 J -43306624.97 -43306624.84 -43306624.70 0.0084 0.0018  
 Mercury -123280-03-01 17:03 J -43306536.91 -43306536.79 -43306536.66 0.0084 0.0035  
 Mercury -123280-05-28 18:15 J -43306448.83 -43306448.74 -43306448.61 0.0083 0.0051  
 Mercury -123280-08-24 19:56 J -43306360.75 -43306360.67 -43306360.58 0.0083 0.0066  
 Mercury -123280-11-20 21:08 J -43306272.64 -43306272.62 -43306272.59 0.0083 0.0081  
 Moon -123277-04-24 00:58 J -43305387.71 -43305387.46 -43305387.20 0.0082 0.0001  
 Earth -123277-04-24 03:37 J -43305387.59 -43305387.35 -43305387.09 0.0082 0.0004 \*  
 Venus -123272-05-25 14:10 J -43303530.09 -43303529.91 -43303529.69 0.0079 0.0027  
 Venus -123271-01-05 22:34 J -43303304.72 -43303304.56 -43303304.37 0.0079 0.0042  
 Mercury -123129-07-21 06:01 J -43251242.33 -43251242.25 -43251242.17 0.0061 0.0054  
 Mercury -123129-10-17 06:58 J -43251154.32 -43251154.21 -43251154.08 0.0061 0.0046  
 Mercury -123128-01-13 08:10 J -43251066.29 -43251066.16 -43251066.00 0.0061 0.0038  
 Mercury -123128-04-11 09:22 J -43250978.26 -43250978.11 -43250977.93 0.0061 0.0030  
 Mercury -123128-07-08 10:49 J -43250890.22 -43250890.05 -43250889.87 0.0061 0.0022  
 Mercury -123128-10-04 12:15 J -43250802.17 -43250801.99 -43250801.81 0.0061 0.0013  
 Mercury -123128-12-31 13:27 J -43250714.12 -43250713.94 -43250713.75 0.0061 0.0005  
 Mercury -123127-03-29 14:54 J -43250626.07 -43250625.88 -43250625.70 0.0061 0.0003  
 Mercury -123127-06-25 16:06 J -43250538.01 -43250537.83 -43250537.65 0.0061 0.0011  
 Mercury -123127-09-21 17:18 J -43250449.95 -43250449.78 -43250449.60 0.0061 0.0020  
 Mercury -123127-12-18 18:15 J -43250361.89 -43250361.74 -43250361.56 0.0061 0.0028  
 Mercury -123126-03-16 19:42 J -43250273.82 -43250273.68 -43250273.52 0.0061 0.0036  
 Mercury -123126-06-12 20:54 J -43250185.74 -43250185.63 -43250185.49 0.0061 0.0045  
 Mercury -123126-09-08 21:51 J -43250097.65 -43250097.59 -43250097.47 0.0061 0.0054  
 Mercury -123126-12-05 23:46 J -43250009.51 -43250009.51 -43250009.50 0.0062 0.0061  
 Moon -123121-10-30 18:30 J -43248219.00 -43248218.73 -43248218.47 0.0063 0.0001  
 Earth -123121-10-30 21:51 J -43248218.86 -43248218.59 -43248218.32 0.0063 0.0004 \*  
 Mars -123115-07-16 00:15 J -43246134.70 -43246134.49 -43246134.20 0.0065 0.0039

Venus	-123113-06-06 17:03 J	-43245442.96	-43245442.79	-43245442.58	0.0066	0.0036
Venus	-123112-01-17 23:03 J	-43245217.77	-43245217.54	-43245217.31	0.0066	0.0008
Venus	-123112-08-31 04:49 J	-43244992.44	-43244992.30	-43244992.15	0.0066	0.0052
Mercury	-123036-05-19 23:03 J	-43217336.60	-43217336.54	-43217336.46	0.0084	0.0073
Mercury	-123036-08-16 00:30 J	-43217248.57	-43217248.48	-43217248.37	0.0084	0.0057
Mercury	-123036-11-12 01:56 J	-43217160.54	-43217160.42	-43217160.30	0.0084	0.0041
Mercury	-123035-02-08 03:22 J	-43217072.49	-43217072.36	-43217072.23	0.0084	0.0024
Mercury	-123035-05-07 04:34 J	-43216984.44	-43216984.31	-43216984.17	0.0084	0.0009
Mercury	-123035-08-03 06:01 J	-43216896.38	-43216896.25	-43216896.11	0.0084	0.0008
Mercury	-123035-10-30 07:13 J	-43216808.32	-43216808.20	-43216808.06	0.0084	0.0024
Mercury	-123034-01-26 08:39 J	-43216720.26	-43216720.14	-43216720.01	0.0083	0.0039
Mercury	-123034-04-24 10:06 J	-43216632.18	-43216632.08	-43216631.97	0.0083	0.0055
Mercury	-123034-07-21 11:18 J	-43216544.09	-43216544.03	-43216543.95	0.0083	0.0070
Moon	-123031-04-26 10:06 J	-43215534.31	-43215534.08	-43215533.84	0.0082	0.0020
Earth	-123031-04-26 12:15 J	-43215534.23	-43215533.99	-43215533.74	0.0082	0.0018 *
Mars	-123027-01-25 01:42 J	-43214164.74	-43214164.43	-43214164.11	0.0080	0.0018
Venus	-123027-11-10 19:56 J	-43213874.78	-43213874.67	-43213874.55	0.0079	0.0065
Venus	-123026-06-24 04:34 J	-43213649.52	-43213649.31	-43213649.10	0.0079	0.0004
Venus	-123025-02-04 12:44 J	-43213424.04	-43213423.97	-43213423.87	0.0078	0.0072

# 123RD MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 123rd millennium BCE.**

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
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TRANSIT

TIME

Mercury -122883-03-20 18:58 J -43161513.75 -43161513.71 -43161513.62 0.0061 0.0057

Mercury -122883-06-16 20:54 J -43161425.74 -43161425.63 -43161425.52 0.0061 0.0048

Mercury -122883-09-12 21:51 J -43161337.72 -43161337.59 -43161337.44 0.0061 0.0040

Mercury -122883-12-09 23:03 J -43161249.68 -43161249.54 -43161249.37 0.0061 0.0032

Mercury -122882-03-08 00:30 J -43161161.64 -43161161.48 -43161161.30 0.0061 0.0024

Mercury -122882-06-04 01:42 J -43161073.60 -43161073.43 -43161073.24 0.0061 0.0016

Mercury -122882-08-31 03:22 J -43160985.55 -43160985.36 -43160985.18 0.0061 0.0007

Mercury -122882-11-27 04:34 J -43160897.50 -43160897.31 -43160897.12 0.0061 0.0001

Mercury -122881-02-23 05:46 J -43160809.44 -43160809.26 -43160809.07 0.0061 0.0009

Mercury -122881-05-21 06:58 J -43160721.38 -43160721.21 -43160721.02 0.0061 0.0018

Mercury -122881-08-17 07:56 J -43160633.32 -43160633.17 -43160632.98 0.0061 0.0027

Mercury -122881-11-13 09:22 J -43160545.25 -43160545.11 -43160544.94 0.0061 0.0035

Mercury -122880-02-09 10:49 J -43160457.17 -43160457.05 -43160456.91 0.0061 0.0043

Mercury -122880-05-08 11:46 J -43160369.09 -43160369.01 -43160368.89 0.0061 0.0052

Mercury -122880-08-04 13:13 J -43160280.98 -43160280.95 -43160280.89 0.0062 0.0060

Moon -122876-10-31 16:20 J -43158731.94 -43158731.82 -43158731.64 0.0063 0.0053

Earth -122876-10-31 16:06 J -43158731.92 -43158731.83 -43158731.68 0.0063 0.0056 \*

Earth -122875-11-02 05:32 J -43158365.52 -43158365.27 -43158365.01 0.0063 0.0021

Moon -122875-11-02 06:44 J -43158365.45 -43158365.22 -43158364.96 0.0063 0.0018 \*

Mars -122869-12-07 00:30 J -43156138.62 -43156138.48 -43156138.31 0.0065 0.0057

Venus -122868-11-23 01:27 J -43155787.57 -43155787.44 -43155787.28 0.0066 0.0051

Venus -122867-07-06 07:13 J -43155562.42 -43155562.20 -43155561.96 0.0066 0.0008

Venus -122866-02-16 12:44 J -43155337.14 -43155336.97 -43155336.76 0.0066 0.0036

Mercury -122790-01-17 14:25 J -43127607.95 -43127607.90 -43127607.83 0.0084 0.0075

Mercury -122790-04-15 15:37 J -43127519.93 -43127519.85 -43127519.74 0.0084 0.0060

Mercury -122790-07-12 17:18 J -43127431.89 -43127431.78 -43127431.66 0.0084 0.0043

Mercury -122790-10-08 18:44 J -43127343.85 -43127343.72 -43127343.59 0.0084 0.0027

Mercury -122789-01-04 20:10 J -43127255.80 -43127255.66 -43127255.53 0.0084 0.0011

Mercury -122789-04-01 21:22 J -43127167.74 -43127167.61 -43127167.47 0.0084 0.0005

Mercury -122789-06-28 22:49 J -43127079.68 -43127079.55 -43127079.42 0.0084 0.0021

Mercury -122789-09-25 00:01 J -43126991.62 -43126991.50 -43126991.37 0.0084 0.0036

Mercury -122789-12-22 01:13 J -43126903.54 -43126903.45 -43126903.33 0.0083 0.0052

Mercury -122788-03-20 02:39 J -43126815.46 -43126815.39 -43126815.30 0.0083 0.0068

Mercury -122788-06-16 04:06 J -43126727.33 -43126727.33 -43126727.32 0.0083 0.0083

Earth -122785-04-28 02:25 J -43125680.56 -43125680.40 -43125680.21 0.0082 0.0058

Moon -122785-04-28 05:03 J -43125680.43 -43125680.29 -43125680.10 0.0082 0.0061 \*

Venus -122781-12-09 12:58 J -43123994.16 -43123993.96 -43123993.75 0.0079 0.0021

Venus -122780-07-22 21:08 J -43123768.77 -43123768.62 -43123768.44 0.0079 0.0048

Mercury -122638-11-18 08:39 J -43071785.16 -43071785.14 -43071785.10 0.0061 0.0060

Mercury -122637-02-14 09:51 J -43071697.17 -43071697.09 -43071696.98 0.0061 0.0052

Mercury -122637-05-12 11:03 J -43071609.15 -43071609.04 -43071608.89 0.0061 0.0044

Mercury -122637-08-08 12:15 J -43071521.12 -43071520.99 -43071520.82 0.0061 0.0036

Mercury -122637-11-04 13:27 J -43071433.09 -43071432.94 -43071432.75 0.0061 0.0028

Mercury -122636-01-31 15:08 J -43071345.04 -43071344.87 -43071344.69 0.0061 0.0019

Mercury -122636-04-29 16:20 J -43071257.00 -43071256.82 -43071256.63 0.0061 0.0011

Mercury -122636-07-26 17:46 J -43071168.94 -43071168.76 -43071168.57 0.0061 0.0003

Mercury -122636-10-22 18:58 J -43071080.89 -43071080.71 -43071080.52 0.0061 0.0006

Mercury -122635-01-18 20:10 J -43070992.83 -43070992.66 -43070992.47 0.0061 0.0014

Mercury -122635-04-16 21:22 J -43070904.77 -43070904.61 -43070904.42 0.0061 0.0023

Mercury -122635-07-13 22:49 J -43070816.70 -43070816.55 -43070816.38 0.0061 0.0031

Mercury -122635-10-10 00:15 J -43070728.63 -43070728.49 -43070728.34 0.0061 0.0039

Mercury -122634-01-06 00:58 J -43070640.55 -43070640.46 -43070640.32 0.0061 0.0048

Mercury -122634-04-04 02:25 J -43070552.46 -43070552.40 -43070552.30 0.0061 0.0056

Moon -122630-11-02 19:13 J -43068878.89 -43068878.70 -43068878.49 0.0063 0.0041

Earth -122630-11-02 22:49 J -43068878.72 -43068878.55 -43068878.34 0.0063 0.0044 \*

Earth -122629-11-03 11:46 J -43068512.22 -43068512.01 -43068511.76 0.0063 0.0033

Moon -122629-11-03 14:39 J -43068512.10 -43068511.89 -43068511.62 0.0063 0.0031 \*

Venus -122622-12-22 13:56 J -43065907.12 -43065906.92 -43065906.71 0.0066 0.0028

Venus -122621-08-03 19:42 J -43065681.90 -43065681.68 -43065681.45 0.0066 0.0016

Venus -122620-03-17 01:13 J -43065456.53 -43065456.45 -43065456.33 0.0066 0.0060

Mercury -122545-12-13 06:15 J -43037791.31 -43037791.24 -43037791.16 0.0084 0.0068

Mercury -122544-03-11 07:42 J -43037703.28 -43037703.18 -43037703.07 0.0084 0.0052

Mercury -122544-06-07 09:08 J -43037615.24 -43037615.12 -43037615.00 0.0084 0.0036

Mercury -122544-09-03 10:20 J -43037527.20 -43037527.07 -43037526.93 0.0084 0.0021

Mercury -122544-11-30 11:46 J -43037439.14 -43037439.01 -43037438.87 0.0084 0.0005

Mercury -122543-02-26 13:13 J -43037351.09 -43037350.95 -43037350.81 0.0084 0.0011

Mercury -122543-05-25 14:39 J -43037263.02 -43037262.89 -43037262.76 0.0084 0.0027

Mercury -122543-08-21 15:51 J -43037174.95 -43037174.84 -43037174.72 0.0083 0.0043

Mercury -122543-11-17 17:03 J -43037086.88 -43037086.79 -43037086.68 0.0083 0.0058

Mercury -122542-02-13 18:15 J -43036998.79 -43036998.74 -43036998.66 0.0083 0.0074

Moon -122540-04-28 06:44 J -43036194.27 -43036194.22 -43036194.15 0.0082 0.0079

Earth -122540-04-28 09:08 J -43036194.21 -43036194.12 -43036194.02 0.0082 0.0075 \*

Earth -122539-04-30 12:15 J -43035826.99 -43035826.99 -43035826.95 0.0081 0.0081

Venus -122535-05-27 18:30 J -43034338.86 -43034338.73 -43034338.57 0.0079 0.0057

Venus -122534-01-08 03:22 J -43034113.57 -43034113.36 -43034113.15 0.0079 0.0012

Mercury -122392-10-13 23:03 J -42981968.59 -42981968.54 -42981968.44 0.0061 0.0056

Mercury -122391-01-10 00:15 J -42981880.58 -42981880.49 -42981880.35 0.0061 0.0048

Mercury -122391-04-08 02:10 J -42981792.55 -42981792.41 -42981792.27 0.0061 0.0039

Mercury -122391-07-05 03:22 J -42981704.52 -42981704.36 -42981704.20 0.0061 0.0031

Mercury -122391-10-01 04:34 J -42981616.48 -42981616.31 -42981616.13 0.0061 0.0023

Mercury -122391-12-28 05:46 J -42981528.43 -42981528.26 -42981528.07 0.0061 0.0015

Mercury -122390-03-26 07:13 J -42981440.38 -42981440.20 -42981440.01 0.0061 0.0007

Mercury -122390-06-22 08:25 J -42981352.33 -42981352.15 -42981351.96 0.0061 0.0003

Mercury -122390-09-18 09:37 J -42981264.28 -42981264.10 -42981263.91 0.0061 0.0010

Mercury -122390-12-15 10:49 J -42981176.22 -42981176.05 -42981175.86 0.0061 0.0019

Mercury -122389-03-12 12:15 J -42981088.15 -42981087.99 -42981087.81 0.0061 0.0027

Mercury -122389-06-08 13:42 J -42981000.08 -42980999.93 -42980999.78 0.0061 0.0035

Mercury -122389-09-04 14:39 J -42980912.01 -42980911.89 -42980911.74 0.0061 0.0043

Mercury -122389-12-01 15:51 J -42980823.92 -42980823.84 -42980823.72 0.0061 0.0052

Mercury -122388-02-27 17:32 J -42980735.80 -42980735.77 -42980735.73 0.0062 0.0060

Earth -122384-11-04 05:32 J -42979025.50 -42979025.27 -42979025.04 0.0063 0.0032

Moon -122384-11-04 07:42 J -42979025.39 -42979025.18 -42979024.94 0.0063 0.0032 \*

Moon -122383-11-05 14:25 J -42978659.07 -42978658.90 -42978658.69 0.0063 0.0045

Earth -122383-11-05 18:01 J -42978658.91 -42978658.75 -42978658.53 0.0063 0.0045 \*

Mars -122378-10-31 10:49 J -42976838.31 -42976838.05 -42976837.74 0.0065 0.0025

Venus -122376-06-08 20:25 J -42976251.78 -42976251.65 -42976251.47 0.0066 0.0048

Venus -122375-01-20 02:39 J -42976026.62 -42976026.39 -42976026.16 0.0066 0.0004

Venus -122375-09-02 08:10 J -42975801.33 -42975801.16 -42975800.97 0.0066 0.0040

Mercury -122299-08-12 21:08 J -42948062.68 -42948062.62 -42948062.56 0.0084 0.0075

Mercury -122299-11-08 22:34 J -42947974.66 -42947974.56 -42947974.46 0.0084 0.0059

Mercury -122298-02-04 23:46 J -42947886.62 -42947886.51 -42947886.39 0.0084 0.0043

Mercury -122298-05-04 01:13 J -42947798.58 -42947798.45 -42947798.32 0.0084 0.0027

Mercury -122298-07-31 02:39 J -42947710.53 -42947710.39 -42947710.25 0.0084 0.0011

Mercury -122298-10-27 03:51 J -42947622.47 -42947622.34 -42947622.20 0.0084 0.0006

Mercury -122297-01-23 05:18 J -42947534.41 -42947534.28 -42947534.14 0.0084 0.0021

Mercury -122297-04-20 06:30 J -42947446.35 -42947446.23 -42947446.10 0.0084 0.0037

Mercury -122297-07-17 07:42 J -42947358.27 -42947358.18 -42947358.06 0.0083 0.0053

Mercury -122297-10-13 09:08 J -42947270.19 -42947270.12 -42947270.03 0.0083 0.0068

Mercury -122296-01-09 10:34 J -42947182.06 -42947182.06 -42947182.05 0.0083 0.0083

Earth -122294-04-30 20:39 J -42946340.82 -42946340.64 -42946340.40 0.0082 0.0044

Moon -122294-05-01 00:01 J -42946340.69 -42946340.50 -42946340.27 0.0082 0.0047 \*

Mars -122290-05-11 10:34 J -42944869.33 -42944869.06 -42944868.75 0.0080 0.0038

Venus -122289-06-25 10:49 J -42944458.26 -42944458.05 -42944457.85 0.0079 0.0018

Venus -122288-02-05 18:44 J -42944232.86 -42944232.72 -42944232.54 0.0079 0.0051

Mercury -122146-09-09 12:58 J -42892152.02 -42892151.96 -42892151.85 0.0061 0.0054

Mercury -122146-12-06 14:54 J -42892064.01 -42892063.88 -42892063.76 0.0061 0.0045

Mercury -122145-03-03 15:51 J -42891975.98 -42891975.84 -42891975.68 0.0061 0.0037

Mercury -122145-05-30 17:18 J -42891887.94 -42891887.78 -42891887.61 0.0061 0.0029



Mercury -122145-08-26 18:30 J -42891799.90 -42891799.73 -42891799.54 0.0061 0.0021  
 Mercury -122145-11-22 19:42 J -42891711.85 -42891711.68 -42891711.48 0.0061 0.0013  
 Mercury -122144-02-18 21:22 J -42891623.80 -42891623.61 -42891623.42 0.0061 0.0004  
 Mercury -122144-05-17 22:34 J -42891535.75 -42891535.56 -42891535.37 0.0061 0.0004  
 Mercury -122144-08-13 23:46 J -42891447.69 -42891447.51 -42891447.32 0.0061 0.0012  
 Mercury -122144-11-10 00:58 J -42891359.63 -42891359.46 -42891359.27 0.0061 0.0021  
 Mercury -122143-02-06 02:25 J -42891271.56 -42891271.40 -42891271.23 0.0061 0.0029  
 Mercury -122143-05-05 03:22 J -42891183.49 -42891183.36 -42891183.19 0.0061 0.0037  
 Mercury -122143-08-01 04:34 J -42891095.41 -42891095.31 -42891095.16 0.0061 0.0046  
 Mercury -122143-10-28 06:15 J -42891007.32 -42891007.24 -42891007.14 0.0061 0.0054  
 Moon -122138-11-06 05:46 J -42889172.50 -42889172.26 -42889172.02 0.0063 0.0029  
 Earth -122138-11-06 09:08 J -42889172.36 -42889172.12 -42889171.87 0.0063 0.0026 \*  
 Earth -122137-11-06 21:51 J -42888805.73 -42888805.59 -42888805.40 0.0063 0.0051  
 Moon -122137-11-07 01:27 J -42888805.56 -42888805.44 -42888805.27 0.0063 0.0054 \*  
 Mars -122131-03-24 01:42 J -42886842.59 -42886842.43 -42886842.22 0.0065 0.0052  
 Venus -122130-07-08 07:42 J -42886371.37 -42886371.18 -42886370.96 0.0066 0.0030  
 Venus -122129-02-18 13:27 J -42886146.16 -42886145.94 -42886145.71 0.0066 0.0014  
 Venus -122129-09-30 18:44 J -42885920.80 -42885920.72 -42885920.58 0.0066 0.0059  
 Mercury -122053-07-08 12:15 J -42858246.05 -42858245.99 -42858245.92 0.0084 0.0074  
 Mercury -122053-10-04 13:42 J -42858158.03 -42858157.93 -42858157.83 0.0084 0.0058  
 Mercury -122053-12-31 14:54 J -42858069.99 -42858069.88 -42858069.75 0.0084 0.0042  
 Mercury -122052-03-29 16:20 J -42857981.95 -42857981.82 -42857981.69 0.0084 0.0026  
 Mercury -122052-06-25 17:46 J -42857893.90 -42857893.76 -42857893.62 0.0084 0.0010  
 Mercury -122052-09-21 19:13 J -42857805.84 -42857805.70 -42857805.57 0.0084 0.0006  
 Mercury -122052-12-18 20:25 J -42857717.78 -42857717.65 -42857717.51 0.0084 0.0021  
 Mercury -122051-03-16 21:51 J -42857629.71 -42857629.59 -42857629.47 0.0084 0.0037  
 Mercury -122051-06-12 23:03 J -42857541.64 -42857541.54 -42857541.43 0.0083 0.0053  
 Mercury -122051-09-09 00:15 J -42857453.56 -42857453.49 -42857453.40 0.0083 0.0068  
 Moon -122048-05-02 00:58 J -42856487.67 -42856487.46 -42856487.22 0.0082 0.0030  
 Earth -122048-05-02 03:08 J -42856487.59 -42856487.37 -42856487.13 0.0082 0.0033 \*

Venus -122044-12-11 14:10 J -42854803.02 -42854802.91 -42854802.77 0.0079 0.0064

Venus -122043-07-24 23:03 J -42854577.75 -42854577.54 -42854577.32 0.0079 0.0006

Venus -122042-03-07 06:58 J -42854352.25 -42854352.21 -42854352.11 0.0079 0.0075

# 122ND MILLENNIUM BCE.

**This is a list of transits visible from Pluto in the 122nd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-121900-05-09 01:41 J		-42802423.43	-42802423.43	-42802423.40	0.0061	0.0060	
Mercury	-121900-08-05 03:22 J		-42802335.46	-42802335.36	-42802335.27	0.0061	0.0052	
Mercury	-121900-11-01 04:20 J		-42802247.44	-42802247.32	-42802247.18	0.0061	0.0044	
Mercury	-121899-01-28 05:32 J		-42802159.41	-42802159.27	-42802159.10	0.0061	0.0036	
Mercury	-121899-04-26 06:58 J		-42802071.37	-42802071.21	-42802071.04	0.0061	0.0028	
Mercury	-121899-07-23 08:10 J		-42801983.33	-42801983.16	-42801982.97	0.0061	0.0020	
Mercury	-121899-10-19 09:37 J		-42801895.28	-42801895.10	-42801894.91	0.0061	0.0012	
Mercury	-121898-01-15 11:03 J		-42801807.23	-42801807.04	-42801806.85	0.0061	0.0003	
Mercury	-121898-04-13 12:15 J		-42801719.17	-42801718.99	-42801718.80	0.0061	0.0005	
Mercury	-121898-07-10 13:27 J		-42801631.11	-42801630.94	-42801630.75	0.0061	0.0013	
Mercury	-121898-10-06 14:53 J		-42801543.05	-42801542.88	-42801542.70	0.0061	0.0022	
Mercury	-121897-01-02 15:51 J		-42801454.99	-42801454.84	-42801454.66	0.0061	0.0030	
Mercury	-121897-03-30 17:03 J		-42801366.91	-42801366.79	-42801366.62	0.0061	0.0039	

Mercury -121897-06-26 18:29 J -42801278.83 -42801278.73 -42801278.59 0.0061 0.0047

Mercury -121897-09-22 20:10 J -42801190.74 -42801190.66 -42801190.58 0.0061 0.0055

Earth -121892-11-07 12:15 J -42799319.22 -42799318.99 -42799318.71 0.0063 0.0023

Moon -121892-11-07 16:05 J -42799319.06 -42799318.83 -42799318.56 0.0063 0.0021 \*

Moon -121891-11-08 22:20 J -42798952.70 -42798952.57 -42798952.40 0.0063 0.0052

Earth -121891-11-09 01:27 J -42798952.55 -42798952.44 -42798952.27 0.0063 0.0055 \*

Venus -121885-12-23 12:29 J -42796716.08 -42796715.98 -42796715.84 0.0066 0.0056

Venus -121884-08-05 18:29 J -42796490.95 -42796490.73 -42796490.49 0.0066 0.0013

Venus -121883-03-19 00:15 J -42796265.68 -42796265.49 -42796265.28 0.0066 0.0031

Mercury -121807-06-04 03:22 J -42768429.42 -42768429.36 -42768429.28 0.0084 0.0071

Mercury -121807-08-31 04:49 J -42768341.40 -42768341.30 -42768341.19 0.0084 0.0055

Mercury -121807-11-27 06:15 J -42768253.36 -42768253.24 -42768253.12 0.0084 0.0039

Mercury -121806-02-23 07:41 J -42768165.31 -42768165.18 -42768165.05 0.0084 0.0023

Mercury -121806-05-22 09:08 J -42768077.26 -42768077.12 -42768076.99 0.0084 0.0008

Mercury -121806-08-18 10:20 J -42767989.20 -42767989.07 -42767988.93 0.0084 0.0008

Mercury -121806-11-14 11:46 J -42767901.14 -42767901.01 -42767900.88 0.0084 0.0024

Mercury -121805-02-10 12:58 J -42767813.08 -42767812.96 -42767812.83 0.0084 0.0040

Mercury -121805-05-08 14:10 J -42767725.00 -42767724.91 -42767724.80 0.0083 0.0055

Mercury -121805-08-04 15:37 J -42767636.91 -42767636.85 -42767636.77 0.0083 0.0070

Moon -121802-05-04 07:56 J -42766634.41 -42766634.17 -42766633.92 0.0082 0.0023

Earth -121802-05-04 10:34 J -42766634.30 -42766634.06 -42766633.81 0.0082 0.0019 \*

Venus -121797-01-10 02:53 J -42764922.55 -42764922.38 -42764922.18 0.0079 0.0037

Venus -121797-08-22 11:32 J -42764697.20 -42764697.02 -42764696.81 0.0079 0.0033

Mercury -121654-07-01 16:20 J -42712518.90 -42712518.82 -42712518.72 0.0061 0.0053

Mercury -121654-09-27 17:32 J -42712430.88 -42712430.77 -42712430.63 0.0061 0.0045

Mercury -121654-12-24 18:58 J -42712342.85 -42712342.71 -42712342.55 0.0061 0.0037

Mercury -121653-03-21 20:10 J -42712254.81 -42712254.66 -42712254.48 0.0061 0.0029

Mercury -121653-06-17 21:22 J -42712166.77 -42712166.61 -42712166.42 0.0061 0.0021

Mercury -121653-09-13 22:49 J -42712078.72 -42712078.55 -42712078.35 0.0061 0.0013

Mercury -121653-12-11 00:15 J -42711990.67 -42711990.49 -42711990.30 0.0061 0.0004

Mercury -121652-03-09 01:41 J -42711902.62 -42711902.43 -42711902.24 0.0061 0.0004  
 Mercury -121652-06-05 02:53 J -42711814.56 -42711814.38 -42711814.19 0.0061 0.0012  
 Mercury -121652-09-01 04:05 J -42711726.50 -42711726.33 -42711726.15 0.0061 0.0021  
 Mercury -121652-11-28 05:03 J -42711638.43 -42711638.29 -42711638.10 0.0061 0.0030  
 Mercury -121651-02-24 06:29 J -42711550.36 -42711550.23 -42711550.07 0.0061 0.0037  
 Mercury -121651-05-23 07:56 J -42711462.28 -42711462.17 -42711462.03 0.0061 0.0046  
 Mercury -121651-08-19 09:22 J -42711374.19 -42711374.11 -42711374.02 0.0061 0.0054  
 Earth -121646-11-09 14:10 J -42709466.16 -42709465.91 -42709465.66 0.0063 0.0024  
 Moon -121646-11-09 17:03 J -42709466.02 -42709465.79 -42709465.52 0.0063 0.0025 \*  
 Moon -121645-11-10 01:13 J -42709099.57 -42709099.45 -42709099.29 0.0063 0.0054  
 Earth -121645-11-10 03:37 J -42709099.50 -42709099.35 -42709099.21 0.0063 0.0053 \*  
 Mars -121640-02-13 22:34 J -42707542.58 -42707542.56 -42707542.45 0.0065 0.0064  
 Venus -121638-01-21 21:22 J -42706835.76 -42706835.61 -42706835.42 0.0066 0.0044  
 Venus -121638-09-04 03:37 J -42706610.58 -42706610.35 -42706610.12 0.0066 0.0000  
 Venus -121637-04-16 08:39 J -42706385.29 -42706385.14 -42706384.94 0.0066 0.0044  
 Mercury -121561-04-29 17:32 J -42678612.81 -42678612.77 -42678612.70 0.0084 0.0077  
 Mercury -121561-07-26 18:58 J -42678524.80 -42678524.71 -42678524.61 0.0084 0.0061  
 Mercury -121561-10-22 20:25 J -42678436.76 -42678436.65 -42678436.53 0.0084 0.0045  
 Mercury -121560-01-18 21:37 J -42678348.72 -42678348.60 -42678348.46 0.0084 0.0029  
 Mercury -121560-04-16 23:17 J -42678260.67 -42678260.53 -42678260.40 0.0084 0.0013  
 Mercury -121560-07-14 00:29 J -42678172.61 -42678172.48 -42678172.34 0.0084 0.0004  
 Mercury -121560-10-10 01:56 J -42678084.55 -42678084.42 -42678084.29 0.0084 0.0018  
 Mercury -121559-01-06 03:08 J -42677996.49 -42677996.37 -42677996.24 0.0084 0.0034  
 Mercury -121559-04-04 04:34 J -42677908.42 -42677908.31 -42677908.20 0.0083 0.0049  
 Mercury -121559-07-01 05:32 J -42677820.34 -42677820.27 -42677820.17 0.0083 0.0066  
 Mercury -121559-09-27 06:58 J -42677732.23 -42677732.21 -42677732.16 0.0083 0.0081  
 Moon -121556-05-05 09:08 J -42676781.35 -42676781.12 -42676780.88 0.0082 0.0025  
 Earth -121556-05-05 12:29 J -42676781.21 -42676780.98 -42676780.74 0.0082 0.0024 \*  
 Mars -121553-08-22 22:05 J -42675575.71 -42675575.58 -42675575.38 0.0080 0.0069  
 Venus -121551-02-07 12:58 J -42675042.15 -42675041.96 -42675041.74 0.0079 0.0024

Venus -121551-09-20 21:22 J -42674816.76 -42674816.61 -42674816.42 0.0079 0.0046  
 Mercury -121408-05-27 05:03 J -42622702.34 -42622702.29 -42622702.20 0.0061 0.0056  
 Mercury -121408-08-23 06:15 J -42622614.33 -42622614.24 -42622614.10 0.0061 0.0048  
 Mercury -121408-11-19 07:41 J -42622526.30 -42622526.18 -42622526.02 0.0061 0.0040  
 Mercury -121407-02-15 08:53 J -42622438.27 -42622438.13 -42622437.95 0.0061 0.0032  
 Mercury -121407-05-14 10:34 J -42622350.23 -42622350.06 -42622349.88 0.0061 0.0023  
 Mercury -121407-08-10 11:46 J -42622262.18 -42622262.01 -42622261.82 0.0061 0.0015  
 Mercury -121407-11-06 13:13 J -42622174.13 -42622173.95 -42622173.76 0.0061 0.0007  
 Mercury -121406-02-02 14:39 J -42622086.08 -42622085.89 -42622085.70 0.0061 0.0002  
 Mercury -121406-05-01 15:51 J -42621998.02 -42621997.84 -42621997.65 0.0061 0.0010  
 Mercury -121406-07-28 16:49 J -42621909.96 -42621909.80 -42621909.60 0.0061 0.0018  
 Mercury -121406-10-24 18:15 J -42621821.90 -42621821.74 -42621821.56 0.0061 0.0026  
 Mercury -121405-01-20 19:27 J -42621733.83 -42621733.69 -42621733.52 0.0061 0.0035  
 Mercury -121405-04-17 20:53 J -42621645.76 -42621645.63 -42621645.49 0.0061 0.0043  
 Mercury -121405-07-14 21:51 J -42621557.67 -42621557.59 -42621557.46 0.0061 0.0051  
 Mercury -121405-10-10 23:17 J -42621469.56 -42621469.53 -42621469.47 0.0061 0.0060  
 Earth -121400-11-10 13:27 J -42619613.16 -42619612.94 -42619612.68 0.0063 0.0028  
 Moon -121400-11-10 14:53 J -42619613.10 -42619612.88 -42619612.61 0.0063 0.0031 \*  
 Earth -121399-11-12 02:39 J -42619246.53 -42619246.39 -42619246.19 0.0063 0.0049  
 Moon -121399-11-12 03:22 J -42619246.48 -42619246.36 -42619246.18 0.0063 0.0052 \*  
 Mars -121394-07-08 08:39 J -42617547.44 -42617547.14 -42617546.83 0.0065 0.0005  
 Venus -121392-02-19 06:01 J -42616955.43 -42616955.25 -42616955.04 0.0066 0.0034  
 Venus -121392-10-02 11:46 J -42616730.23 -42616730.01 -42616729.77 0.0066 0.0010  
 Venus -121391-05-15 17:32 J -42616504.90 -42616504.77 -42616504.64 0.0066 0.0054  
 Mercury -121315-03-26 08:10 J -42588796.19 -42588796.16 -42588796.12 0.0084 0.0081  
 Mercury -121315-06-22 09:08 J -42588708.19 -42588708.12 -42588708.02 0.0084 0.0066  
 Mercury -121315-09-18 10:49 J -42588620.16 -42588620.05 -42588619.94 0.0084 0.0049  
 Mercury -121315-12-15 12:15 J -42588532.11 -42588531.99 -42588531.86 0.0084 0.0033  
 Mercury -121314-03-13 13:27 J -42588444.07 -42588443.94 -42588443.80 0.0084 0.0018  
 Mercury -121314-06-09 14:53 J -42588356.02 -42588355.88 -42588355.74 0.0084 0.0002

Mercury -121314-09-05 16:20 J -42588267.96 -42588267.82 -42588267.69 0.0084 0.0014  
 Mercury -121314-12-02 17:32 J -42588179.89 -42588179.77 -42588179.64 0.0084 0.0029  
 Mercury -121313-02-28 18:58 J -42588091.83 -42588091.71 -42588091.60 0.0083 0.0045  
 Mercury -121313-05-26 19:56 J -42588003.75 -42588003.67 -42588003.56 0.0083 0.0061  
 Mercury -121313-08-22 21:22 J -42587915.66 -42587915.61 -42587915.54 0.0083 0.0076  
 Moon -121310-05-07 13:13 J -42586928.18 -42586927.95 -42586927.72 0.0082 0.0026  
 Earth -121310-05-07 14:53 J -42586928.11 -42586927.88 -42586927.64 0.0082 0.0027 \*  
 Mars -121306-01-14 14:53 J -42585580.11 -42585579.88 -42585579.59 0.0080 0.0048  
 Venus -121306-07-26 14:53 J -42585386.90 -42585386.88 -42585386.86 0.0079 0.0079  
 Venus -121305-03-07 23:32 J -42585161.73 -42585161.52 -42585161.30 0.0079 0.0009  
 Venus -121305-10-19 07:41 J -42584936.30 -42584936.18 -42584936.03 0.0079 0.0061  
 Mercury -121162-04-22 17:32 J -42532885.78 -42532885.77 -42532885.73 0.0060 0.0060  
 Mercury -121162-07-19 18:44 J -42532797.80 -42532797.72 -42532797.61 0.0060 0.0052  
 Mercury -121162-10-15 20:10 J -42532709.78 -42532709.66 -42532709.52 0.0061 0.0044  
 Mercury -121161-01-11 21:22 J -42532621.75 -42532621.61 -42532621.44 0.0061 0.0036  
 Mercury -121161-04-08 22:34 J -42532533.71 -42532533.56 -42532533.37 0.0061 0.0028  
 Mercury -121161-07-06 00:01 J -42532445.67 -42532445.50 -42532445.31 0.0061 0.0020  
 Mercury -121161-10-02 01:27 J -42532357.62 -42532357.44 -42532357.25 0.0061 0.0012  
 Mercury -121161-12-29 02:53 J -42532269.57 -42532269.38 -42532269.19 0.0061 0.0003  
 Mercury -121160-03-27 04:05 J -42532181.51 -42532181.33 -42532181.14 0.0061 0.0005  
 Mercury -121160-06-23 05:32 J -42532093.45 -42532093.27 -42532093.09 0.0061 0.0013  
 Mercury -121160-09-19 06:44 J -42532005.39 -42532005.22 -42532005.04 0.0061 0.0021  
 Mercury -121160-12-16 07:41 J -42531917.32 -42531917.18 -42531917.00 0.0061 0.0030  
 Mercury -121159-03-14 09:08 J -42531829.25 -42531829.12 -42531828.96 0.0061 0.0038  
 Mercury -121159-06-10 10:20 J -42531741.17 -42531741.07 -42531740.93 0.0061 0.0047  
 Mercury -121159-09-06 11:46 J -42531653.08 -42531653.01 -42531652.91 0.0061 0.0055  
 Moon -121154-11-12 09:37 J -42529760.30 -42529760.10 -42529759.88 0.0063 0.0037  
 Earth -121154-11-12 11:17 J -42529760.22 -42529760.03 -42529759.79 0.0063 0.0038 \*  
 Earth -121153-11-13 00:44 J -42529393.66 -42529393.47 -42529393.23 0.0063 0.0039  
 Moon -121153-11-13 01:41 J -42529393.62 -42529393.43 -42529393.17 0.0063 0.0039 \*

Mars -121148-11-28 14:25 J -42527552.10 -42527551.90 -42527551.65 0.0065 0.0044  
 Venus -121146-03-20 13:13 J -42527075.15 -42527074.95 -42527074.74 0.0066 0.0029  
 Venus -121146-10-31 18:29 J -42526849.94 -42526849.73 -42526849.49 0.0066 0.0015  
 Venus -121145-06-13 00:15 J -42526624.58 -42526624.49 -42526624.38 0.0066 0.0059  
 Mercury -121069-05-17 22:34 J -42498891.60 -42498891.56 -42498891.49 0.0084 0.0078  
 Mercury -121069-08-14 00:01 J -42498803.58 -42498803.50 -42498803.40 0.0084 0.0062  
 Mercury -121069-11-10 01:27 J -42498715.55 -42498715.44 -42498715.32 0.0084 0.0046  
 Mercury -121068-02-06 02:53 J -42498627.50 -42498627.38 -42498627.25 0.0084 0.0030  
 Mercury -121068-05-05 04:20 J -42498539.46 -42498539.32 -42498539.19 0.0084 0.0014  
 Mercury -121068-08-01 05:32 J -42498451.40 -42498451.27 -42498451.13 0.0084 0.0003  
 Mercury -121068-10-28 06:58 J -42498363.34 -42498363.21 -42498363.08 0.0084 0.0017  
 Mercury -121067-01-24 08:10 J -42498275.28 -42498275.16 -42498275.03 0.0084 0.0032  
 Mercury -121067-04-22 09:37 J -42498187.21 -42498187.10 -42498186.99 0.0083 0.0048  
 Mercury -121067-07-19 10:34 J -42498099.13 -42498099.06 -42498098.96 0.0083 0.0064  
 Mercury -121067-10-15 12:01 J -42498011.03 -42498011.00 -42498010.95 0.0083 0.0078  
 Earth -121064-05-08 11:17 J -42497075.21 -42497075.03 -42497074.82 0.0082 0.0049  
 Moon -121064-05-08 12:44 J -42497075.16 -42497074.97 -42497074.77 0.0082 0.0053 \*  
 Venus -121060-08-23 21:37 J -42495506.63 -42495506.60 -42495506.55 0.0079 0.0078  
 Venus -121059-04-06 06:44 J -42495281.43 -42495281.22 -42495281.01 0.0079 0.0007  
 Venus -121059-11-17 15:08 J -42495056.00 -42495055.87 -42495055.74 0.0079 0.0062

# 121ST MILLENNIUM BCE

This is a list of transits visible from Pluto in the 121st millennium BCE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
	TRANSIT							
	TIME							
Mercury	-120916-06-14 06:01 J	-42442981.25	-42442981.25	-42442981.21	0.0060	0.0060		
Mercury	-120916-09-10 07:13 J	-42442893.27	-42442893.20	-42442893.08	0.0061	0.0053		
Mercury	-120916-12-07 08:53 J	-42442805.25	-42442805.13	-42442804.99	0.0061	0.0044		
Mercury	-120915-03-05 10:20 J	-42442717.22	-42442717.07	-42442716.92	0.0061	0.0036		
Mercury	-120915-06-01 11:32 J	-42442629.18	-42442629.02	-42442628.84	0.0061	0.0028		
Mercury	-120915-08-28 12:44 J	-42442541.14	-42442540.97	-42442540.78	0.0061	0.0020		
Mercury	-120915-11-24 14:10 J	-42442453.09	-42442452.91	-42442452.72	0.0061	0.0012		
Mercury	-120914-02-20 15:37 J	-42442365.04	-42442364.85	-42442364.66	0.0061	0.0004		
Mercury	-120914-05-19 16:49 J	-42442276.98	-42442276.80	-42442276.61	0.0061	0.0005		
Mercury	-120914-08-15 18:01 J	-42442188.92	-42442188.75	-42442188.55	0.0061	0.0013		
Mercury	-120914-11-11 19:27 J	-42442100.86	-42442100.69	-42442100.51	0.0061	0.0021		
Mercury	-120913-02-07 20:39 J	-42442012.79	-42442012.64	-42442012.46	0.0061	0.0030		
Mercury	-120913-05-05 22:05 J	-42441924.72	-42441924.58	-42441924.43	0.0061	0.0038		
Mercury	-120913-08-01 23:03 J	-42441836.64	-42441836.54	-42441836.40	0.0061	0.0046		
Mercury	-120913-10-29 00:29 J	-42441748.55	-42441748.48	-42441748.38	0.0061	0.0055		
Earth	-120908-11-13 05:32 J	-42439907.35	-42439907.27	-42439907.10	0.0063	0.0056		
Moon	-120908-11-13 08:25 J	-42439907.28	-42439907.15	-42439906.97	0.0063	0.0052	*	
Earth	-120907-11-14 19:27 J	-42439540.93	-42439540.69	-42439540.42	0.0063	0.0020		
Moon	-120907-11-14 19:27 J	-42439540.93	-42439540.69	-42439540.43	0.0063	0.0018	*	
Venus	-120900-04-17 18:01 J	-42437194.95	-42437194.75	-42437194.55	0.0066	0.0031		
Venus	-120900-11-28 23:32 J	-42436969.74	-42436969.52	-42436969.29	0.0066	0.0012		
Venus	-120899-07-12 04:49 J	-42436744.40	-42436744.30	-42436744.17	0.0066	0.0057		
Mercury	-120823-07-10 12:58 J	-42408987.01	-42408986.96	-42408986.90	0.0084	0.0077		
Mercury	-120823-10-06 14:25 J	-42408898.99	-42408898.90	-42408898.80	0.0084	0.0061		
Mercury	-120822-01-02 15:37 J	-42408810.95	-42408810.85	-42408810.72	0.0084	0.0045		
Mercury	-120822-03-31 17:03 J	-42408722.91	-42408722.79	-42408722.66	0.0084	0.0030		
Mercury	-120822-06-27 18:29 J	-42408634.86	-42408634.73	-42408634.59	0.0084	0.0014		



Mercury -120822-09-23 19:56 J -42408546.81 -42408546.67 -42408546.53 0.0084 0.0002

Mercury -120822-12-20 21:08 J -42408458.75 -42408458.62 -42408458.48 0.0084 0.0018

Mercury -120821-03-17 22:34 J -42408370.69 -42408370.56 -42408370.43 0.0084 0.0033

Mercury -120821-06-13 23:46 J -42408282.62 -42408282.51 -42408282.39 0.0083 0.0048

Mercury -120821-09-10 01:13 J -42408194.54 -42408194.45 -42408194.36 0.0083 0.0063

Mercury -120821-12-07 02:10 J -42408106.43 -42408106.41 -42408106.35 0.0083 0.0079

Moon -120818-05-10 05:03 J -42407222.34 -42407222.29 -42407222.19 0.0082 0.0078

Earth -120818-05-10 06:15 J -42407222.29 -42407222.24 -42407222.14 0.0082 0.0078 \*

Moon -120817-05-11 09:22 J -42406855.19 -42406855.11 -42406854.99 0.0081 0.0075

Earth -120817-05-11 09:37 J -42406855.17 -42406855.10 -42406854.98 0.0081 0.0076 \*

Venus -120813-05-04 12:29 J -42405401.19 -42405400.98 -42405400.77 0.0079 0.0010

Venus -120813-12-15 20:25 J -42405175.76 -42405175.65 -42405175.49 0.0079 0.0060

Mercury -120670-11-02 19:13 J -42352988.76 -42352988.70 -42352988.61 0.0060 0.0056

Mercury -120669-01-29 20:25 J -42352900.74 -42352900.65 -42352900.51 0.0061 0.0048

Mercury -120669-04-26 21:51 J -42352812.72 -42352812.59 -42352812.43 0.0061 0.0040

Mercury -120669-07-23 23:03 J -42352724.68 -42352724.54 -42352724.36 0.0061 0.0032

Mercury -120669-10-20 00:29 J -42352636.64 -42352636.48 -42352636.29 0.0061 0.0024

Mercury -120668-01-16 02:10 J -42352548.60 -42352548.41 -42352548.23 0.0061 0.0015

Mercury -120668-04-14 03:22 J -42352460.55 -42352460.36 -42352460.17 0.0061 0.0007

Mercury -120668-07-11 04:34 J -42352372.49 -42352372.31 -42352372.12 0.0061 0.0002

Mercury -120668-10-07 06:01 J -42352284.44 -42352284.25 -42352284.06 0.0061 0.0009

Mercury -120667-01-03 07:13 J -42352196.38 -42352196.20 -42352196.01 0.0061 0.0017

Mercury -120667-04-01 08:10 J -42352108.31 -42352108.16 -42352107.97 0.0061 0.0026

Mercury -120667-06-28 09:37 J -42352020.24 -42352020.10 -42352019.93 0.0061 0.0034

Mercury -120667-09-24 10:49 J -42351932.16 -42351932.05 -42351931.89 0.0061 0.0043

Mercury -120667-12-21 12:15 J -42351844.08 -42351843.99 -42351843.87 0.0061 0.0051

Mercury -120666-03-19 13:56 J -42351755.97 -42351755.92 -42351755.87 0.0061 0.0059

Moon -120661-11-15 07:41 J -42349688.44 -42349688.18 -42349687.91 0.0063 0.0004

Earth -120661-11-15 10:49 J -42349688.30 -42349688.05 -42349687.77 0.0063 0.0007 \*

Venus -120654-05-16 20:10 J -42347314.83 -42347314.66 -42347314.48 0.0065 0.0041

Venus -120654-12-28 01:41 J -42347089.66 -42347089.43 -42347089.20 0.0066 0.0003

Venus -120653-08-09 07:13 J -42346864.35 -42346864.20 -42346864.03 0.0066 0.0046

Mercury -120577-11-28 03:22 J -42318994.43 -42318994.36 -42318994.29 0.0084 0.0071

Mercury -120576-02-24 04:34 J -42318906.41 -42318906.31 -42318906.20 0.0084 0.0055

Mercury -120576-05-23 06:01 J -42318818.37 -42318818.25 -42318818.13 0.0084 0.0039

Mercury -120576-08-19 07:13 J -42318730.32 -42318730.20 -42318730.06 0.0084 0.0024

Mercury -120576-11-15 08:39 J -42318642.27 -42318642.14 -42318642.00 0.0084 0.0009

Mercury -120575-02-11 10:05 J -42318554.22 -42318554.08 -42318553.94 0.0084 0.0007

Mercury -120575-05-10 11:17 J -42318466.16 -42318466.03 -42318465.89 0.0084 0.0023

Mercury -120575-08-06 12:29 J -42318378.09 -42318377.98 -42318377.85 0.0083 0.0039

Mercury -120575-11-02 13:56 J -42318290.02 -42318289.92 -42318289.81 0.0083 0.0054

Mercury -120574-01-29 15:22 J -42318201.93 -42318201.86 -42318201.78 0.0083 0.0069

Moon -120571-05-12 19:56 J -42317002.91 -42317002.67 -42317002.42 0.0081 0.0026

Earth -120571-05-12 21:37 J -42317002.83 -42317002.60 -42317002.35 0.0081 0.0022 \*

Venus -120567-06-02 13:41 J -42315521.10 -42315520.93 -42315520.72 0.0079 0.0033

Venus -120566-01-13 22:34 J -42315295.74 -42315295.56 -42315295.37 0.0079 0.0038

Mercury -120423-03-23 06:58 J -42262996.26 -42262996.21 -42262996.13 0.0060 0.0057

Mercury -120423-06-19 08:25 J -42262908.25 -42262908.15 -42262908.03 0.0060 0.0049

Mercury -120423-09-15 09:37 J -42262820.23 -42262820.10 -42262819.95 0.0061 0.0041

Mercury -120423-12-12 10:49 J -42262732.19 -42262732.05 -42262731.88 0.0061 0.0033

Mercury -120422-03-10 12:15 J -42262644.15 -42262643.99 -42262643.81 0.0061 0.0025

Mercury -120422-06-06 13:41 J -42262556.11 -42262555.93 -42262555.74 0.0061 0.0017

Mercury -120422-09-02 14:53 J -42262468.06 -42262467.88 -42262467.68 0.0061 0.0009

Mercury -120422-11-29 16:20 J -42262380.01 -42262379.82 -42262379.63 0.0061 0.0001

Mercury -120421-02-25 17:32 J -42262291.95 -42262291.77 -42262291.57 0.0061 0.0008

Mercury -120421-05-23 18:44 J -42262203.89 -42262203.72 -42262203.53 0.0061 0.0016

Mercury -120421-08-19 20:10 J -42262115.83 -42262115.66 -42262115.48 0.0061 0.0024

Mercury -120421-11-15 21:22 J -42262027.76 -42262027.61 -42262027.44 0.0061 0.0032

Mercury -120420-02-11 22:49 J -42261939.68 -42261939.55 -42261939.40 0.0061 0.0041

Mercury -120420-05-11 00:15 J -42261851.60 -42261851.49 -42261851.38 0.0061 0.0049

Mercury -120420-08-07 00:58 J -42261763.50 -42261763.46 -42261763.37 0.0061 0.0058

Earth -120415-11-16 20:10 J -42259835.83 -42259835.66 -42259835.46 0.0063 0.0045

Moon -120415-11-16 20:25 J -42259835.81 -42259835.65 -42259835.43 0.0063 0.0043 \*

Moon -120414-11-18 07:27 J -42259469.41 -42259469.19 -42259468.91 0.0063 0.0029

Earth -120414-11-18 09:37 J -42259469.32 -42259469.10 -42259468.85 0.0063 0.0030 \*

Venus -120408-06-13 18:58 J -42257434.76 -42257434.71 -42257434.64 0.0065 0.0063

Venus -120407-01-25 00:29 J -42257209.70 -42257209.48 -42257209.26 0.0066 0.0020

Venus -120407-09-07 05:46 J -42256984.46 -42256984.26 -42256984.03 0.0066 0.0024

Mercury -120330-04-18 16:05 J -42229001.88 -42229001.83 -42229001.76 0.0084 0.0075

Mercury -120330-07-15 17:32 J -42228913.86 -42228913.77 -42228913.67 0.0084 0.0059

Mercury -120330-10-11 18:44 J -42228825.83 -42228825.72 -42228825.59 0.0084 0.0043

Mercury -120329-01-07 20:10 J -42228737.78 -42228737.66 -42228737.52 0.0084 0.0028

Mercury -120329-04-04 21:37 J -42228649.73 -42228649.60 -42228649.46 0.0084 0.0012

Mercury -120329-07-01 23:03 J -42228561.68 -42228561.54 -42228561.40 0.0084 0.0004

Mercury -120329-09-28 00:15 J -42228473.62 -42228473.49 -42228473.35 0.0084 0.0019

Mercury -120329-12-25 01:41 J -42228385.56 -42228385.43 -42228385.31 0.0084 0.0035

Mercury -120328-03-23 02:39 J -42228297.48 -42228297.39 -42228297.27 0.0083 0.0051

Mercury -120328-06-19 04:05 J -42228209.40 -42228209.33 -42228209.24 0.0083 0.0065

Mercury -120328-09-15 05:32 J -42228121.30 -42228121.27 -42228121.23 0.0083 0.0080

Moon -120325-05-12 23:32 J -42227150.72 -42227150.52 -42227150.32 0.0082 0.0047

Earth -120325-05-13 02:25 J -42227150.57 -42227150.40 -42227150.18 0.0082 0.0052 \*

Venus -120321-06-30 12:15 J -42225641.09 -42225640.99 -42225640.88 0.0079 0.0069

Venus -120320-02-10 21:08 J -42225415.83 -42225415.62 -42225415.41 0.0079 0.0002

Venus -120320-09-24 05:03 J -42225190.35 -42225190.29 -42225190.18 0.0079 0.0072

Mercury -120177-11-06 18:44 J -42172915.78 -42172915.72 -42172915.61 0.0060 0.0054

Mercury -120176-02-02 20:10 J -42172827.77 -42172827.66 -42172827.52 0.0060 0.0046

Mercury -120176-05-01 21:22 J -42172739.74 -42172739.61 -42172739.44 0.0060 0.0038

Mercury -120176-07-28 22:49 J -42172651.70 -42172651.55 -42172651.37 0.0061 0.0030

Mercury -120176-10-25 00:15 J -42172563.66 -42172563.49 -42172563.30 0.0061 0.0022

Mercury -120175-01-21 01:27 J -42172475.61 -42172475.44 -42172475.24 0.0061 0.0014

Mercury -120175-04-19 03:08 J -42172387.56 -42172387.37 -42172387.18 0.0061 0.0005

Mercury -120175-07-16 04:34 J -42172299.50 -42172299.31 -42172299.13 0.0061 0.0003

Mercury -120175-10-12 05:46 J -42172211.45 -42172211.26 -42172211.07 0.0061 0.0011

Mercury -120174-01-08 06:58 J -42172123.38 -42172123.21 -42172123.02 0.0061 0.0019

Mercury -120174-04-06 08:25 J -42172035.32 -42172035.15 -42172034.98 0.0061 0.0027

Mercury -120174-07-03 09:08 J -42171947.25 -42171947.12 -42171946.94 0.0061 0.0037

Mercury -120174-09-29 10:34 J -42171859.17 -42171859.06 -42171858.91 0.0061 0.0044

Mercury -120174-12-26 12:01 J -42171771.08 -42171771.00 -42171770.89 0.0061 0.0052

Mercury -120173-03-23 13:13 J -42171682.96 -42171682.95 -42171682.90 0.0061 0.0061

Moon -120168-11-18 12:44 J -42169617.21 -42169616.97 -42169616.70 0.0063 0.0019

Earth -120168-11-18 15:22 J -42169617.10 -42169616.86 -42169616.58 0.0063 0.0017 \*

Earth -120167-11-20 04:49 J -42169250.38 -42169250.30 -42169250.19 0.0063 0.0059

Moon -120167-11-20 06:29 J -42169250.29 -42169250.23 -42169250.13 0.0063 0.0061 \*

Venus -120161-02-22 20:25 J -42167329.78 -42167329.65 -42167329.48 0.0065 0.0050

Venus -120161-10-05 02:25 J -42167104.63 -42167104.40 -42167104.17 0.0066 0.0006

Venus -120160-05-18 07:56 J -42166879.36 -42166879.17 -42166878.98 0.0066 0.0037

Mercury -120084-12-03 05:03 J -42138921.35 -42138921.29 -42138921.22 0.0084 0.0074

Mercury -120083-03-01 06:15 J -42138833.33 -42138833.24 -42138833.13 0.0084 0.0058

Mercury -120083-05-28 07:41 J -42138745.29 -42138745.18 -42138745.06 0.0084 0.0042

Mercury -120083-08-24 09:08 J -42138657.25 -42138657.12 -42138656.99 0.0084 0.0027

Mercury -120083-11-20 10:34 J -42138569.20 -42138569.06 -42138568.93 0.0084 0.0011

Mercury -120082-02-16 11:46 J -42138481.14 -42138481.01 -42138480.87 0.0084 0.0005

Mercury -120082-05-15 13:13 J -42138393.08 -42138392.95 -42138392.82 0.0084 0.0020

Mercury -120082-08-11 14:10 J -42138305.02 -42138304.91 -42138304.77 0.0084 0.0036

Mercury -120082-11-07 15:37 J -42138216.95 -42138216.85 -42138216.73 0.0083 0.0051

Mercury -120081-02-03 17:03 J -42138128.87 -42138128.79 -42138128.70 0.0083 0.0065

Mercury -120081-05-01 18:29 J -42138040.76 -42138040.73 -42138040.70 0.0083 0.0081

Moon -120078-05-16 00:15 J -42136931.74 -42136931.49 -42136931.23 0.0081 0.0004

Earth -120078-05-16 03:37 J -42136931.60 -42136931.35 -42136931.11 0.0081 0.0002 \*

Venus -120074-03-11 14:39 J -42135536.03 -42135535.89 -42135535.73 0.0079 0.0056

Venus -120074-10-22 23:17 J -42135310.73 -42135310.53 -42135310.32 0.0079 0.0015

# 120TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 120th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-119930-06-24 06:15 J	-42082835.32	-42082835.24	-42082835.16	0.0060	0.0054		
Mercury	-119930-09-20 07:27 J	-42082747.31	-42082747.19	-42082747.06	0.0060	0.0046		
Mercury	-119930-12-17 08:53 J	-42082659.28	-42082659.13	-42082658.98	0.0060	0.0038		
Mercury	-119929-03-14 10:05 J	-42082571.24	-42082571.08	-42082570.91	0.0061	0.0030		
Mercury	-119929-06-10 11:17 J	-42082483.20	-42082483.03	-42082482.85	0.0061	0.0022		
Mercury	-119929-09-06 12:44 J	-42082395.15	-42082394.97	-42082394.78	0.0061	0.0014		
Mercury	-119929-12-03 14:10 J	-42082307.10	-42082306.91	-42082306.72	0.0061	0.0006		
Mercury	-119928-03-01 15:22 J	-42082219.05	-42082218.86	-42082218.67	0.0061	0.0002		
Mercury	-119928-05-28 16:34 J	-42082130.99	-42082130.81	-42082130.62	0.0061	0.0011		
Mercury	-119928-08-24 17:46 J	-42082042.93	-42082042.76	-42082042.57	0.0061	0.0019		
Mercury	-119928-11-20 18:58 J	-42081954.86	-42081954.71	-42081954.52	0.0061	0.0027		
Mercury	-119927-02-16 20:25 J	-42081866.79	-42081866.65	-42081866.48	0.0061	0.0035		
Mercury	-119927-05-15 21:37 J	-42081778.71	-42081778.60	-42081778.45	0.0061	0.0044		
Mercury	-119927-08-11 23:03 J	-42081690.63	-42081690.54	-42081690.42	0.0061	0.0052		
Mercury	-119927-11-08 00:29 J	-42081602.51	-42081602.48	-42081602.43	0.0061	0.0060		
Moon	-119921-11-20 04:20 J	-42079398.59	-42079398.32	-42079398.05	0.0063	0.0002		

Earth -119921-11-20 07:56 J -42079398.44 -42079398.17 -42079397.90 0.0063 0.0002 \*  
 Mars -119916-11-12 17:46 J -42077579.92 -42077579.76 -42077579.52 0.0065 0.0050  
 Venus -119915-11-02 20:10 J -42077224.80 -42077224.66 -42077224.46 0.0065 0.0044  
 Venus -119914-06-16 02:10 J -42076999.64 -42076999.41 -42076999.18 0.0066 0.0001  
 Venus -119913-01-27 07:13 J -42076774.35 -42076774.20 -42076774.01 0.0066 0.0044  
 Mercury -119837-07-19 17:17 J -42048840.83 -42048840.78 -42048840.72 0.0084 0.0078  
 Mercury -119837-10-15 18:44 J -42048752.81 -42048752.72 -42048752.63 0.0084 0.0062  
 Mercury -119836-01-11 19:56 J -42048664.77 -42048664.67 -42048664.55 0.0084 0.0046  
 Mercury -119836-04-09 21:22 J -42048576.73 -42048576.61 -42048576.48 0.0084 0.0031  
 Mercury -119836-07-06 22:49 J -42048488.68 -42048488.55 -42048488.42 0.0084 0.0015  
 Mercury -119836-10-03 00:01 J -42048400.63 -42048400.50 -42048400.36 0.0084 0.0002  
 Mercury -119836-12-30 01:27 J -42048312.57 -42048312.44 -42048312.31 0.0084 0.0016  
 Mercury -119835-03-28 02:39 J -42048224.51 -42048224.39 -42048224.26 0.0084 0.0031  
 Mercury -119835-06-24 03:51 J -42048136.44 -42048136.34 -42048136.22 0.0083 0.0047  
 Mercury -119835-09-20 05:17 J -42048048.37 -42048048.28 -42048048.18 0.0083 0.0061  
 Mercury -119835-12-17 06:29 J -42047960.27 -42047960.23 -42047960.17 0.0083 0.0077  
 Moon -119831-05-17 23:17 J -42046712.75 -42046712.53 -42046712.30 0.0081 0.0039  
 Earth -119831-05-18 00:29 J -42046712.68 -42046712.48 -42046712.24 0.0081 0.0039 \*  
 Venus -119828-11-19 14:39 J -42045431.04 -42045430.89 -42045430.71 0.0079 0.0051  
 Jupiter -119827-06-06 01:56 J -42045232.95 -42045232.42 -42045231.87 0.0079 0.0007  
 Venus -119827-07-02 23:32 J -42045205.72 -42045205.52 -42045205.31 0.0079 0.0020  
 Mercury -119683-02-07 16:34 J -41992754.86 -41992754.81 -41992754.71 0.0060 0.0055  
 Mercury -119683-05-06 17:46 J -41992666.85 -41992666.76 -41992666.61 0.0060 0.0048  
 Mercury -119683-08-02 19:13 J -41992578.82 -41992578.70 -41992578.53 0.0060 0.0040  
 Mercury -119683-10-29 20:39 J -41992490.78 -41992490.64 -41992490.46 0.0060 0.0032  
 Mercury -119682-01-25 22:05 J -41992402.74 -41992402.58 -41992402.39 0.0061 0.0023  
 Mercury -119682-04-23 23:46 J -41992314.70 -41992314.51 -41992314.33 0.0061 0.0015  
 Mercury -119682-07-21 00:58 J -41992226.64 -41992226.46 -41992226.27 0.0061 0.0007  
 Mercury -119682-10-17 02:25 J -41992138.59 -41992138.40 -41992138.21 0.0061 0.0001  
 Mercury -119681-01-13 03:37 J -41992050.53 -41992050.35 -41992050.16 0.0061 0.0009

Mercury -119681-04-10 05:03 J -41991962.47 -41991962.29 -41991962.11 0.0061 0.0017  
 Mercury -119681-07-07 06:01 J -41991874.41 -41991874.25 -41991874.06 0.0061 0.0026  
 Mercury -119681-10-03 07:13 J -41991786.34 -41991786.20 -41991786.02 0.0061 0.0034  
 Mercury -119681-12-30 08:25 J -41991698.26 -41991698.15 -41991697.99 0.0061 0.0043  
 Mercury -119680-03-28 09:51 J -41991610.17 -41991610.09 -41991609.96 0.0061 0.0050  
 Mercury -119680-06-24 11:17 J -41991522.07 -41991522.03 -41991521.96 0.0061 0.0059  
 Earth -119675-11-21 10:05 J -41989546.20 -41989546.08 -41989545.93 0.0063 0.0054  
 Moon -119675-11-21 13:13 J -41989546.06 -41989545.95 -41989545.83 0.0063 0.0056 \*  
 Moon -119674-11-22 19:56 J -41989179.90 -41989179.67 -41989179.40 0.0063 0.0023  
 Earth -119674-11-22 23:46 J -41989179.76 -41989179.51 -41989179.25 0.0063 0.0020 \*  
 Mars -119669-04-03 14:53 J -41987586.17 -41987585.88 -41987585.58 0.0065 0.0017  
 Venus -119668-07-13 20:10 J -41987119.85 -41987119.66 -41987119.47 0.0065 0.0038  
 Venus -119667-02-24 01:27 J -41986894.66 -41986894.44 -41986894.20 0.0066 0.0006  
 Venus -119667-10-07 06:58 J -41986669.35 -41986669.21 -41986669.05 0.0066 0.0049  
 Mercury -119590-03-06 05:03 J -41958760.29 -41958760.29 -41958760.27 0.0084 0.0084  
 Mercury -119590-06-02 06:29 J -41958672.30 -41958672.23 -41958672.15 0.0084 0.0069  
 Mercury -119590-08-29 07:41 J -41958584.27 -41958584.18 -41958584.06 0.0084 0.0053  
 Mercury -119590-11-25 09:08 J -41958496.23 -41958496.12 -41958495.99 0.0084 0.0037  
 Mercury -119589-02-21 10:34 J -41958408.19 -41958408.06 -41958407.93 0.0084 0.0022  
 Mercury -119589-05-19 12:01 J -41958320.14 -41958320.00 -41958319.87 0.0084 0.0006  
 Mercury -119589-08-15 13:13 J -41958232.08 -41958231.95 -41958231.81 0.0084 0.0009  
 Mercury -119589-11-11 14:25 J -41958144.02 -41958143.90 -41958143.76 0.0084 0.0025  
 Mercury -119588-02-07 15:51 J -41958055.96 -41958055.84 -41958055.72 0.0083 0.0040  
 Mercury -119588-05-06 17:03 J -41957967.88 -41957967.79 -41957967.68 0.0083 0.0055  
 Mercury -119588-08-02 18:15 J -41957879.80 -41957879.74 -41957879.65 0.0083 0.0070  
 Earth -119585-05-17 16:49 J -41956860.81 -41956860.80 -41956860.74 0.0082 0.0081  
 Moon -119585-05-17 19:27 J -41956860.70 -41956860.69 -41956860.62 0.0082 0.0081  
 Moon -119584-05-19 17:46 J -41956493.85 -41956493.76 -41956493.61 0.0081 0.0070  
 Earth -119584-05-19 20:10 J -41956493.77 -41956493.66 -41956493.52 0.0081 0.0070 \*  
 Mars -119582-10-07 17:17 J -41955623.09 -41955622.78 -41955622.44 0.0080 0.0013

Venus -119581-07-30 13:41 J -41955326.07 -41955325.93 -41955325.75 0.0079 0.0052  
 Venus -119580-03-12 22:34 J -41955100.75 -41955100.56 -41955100.34 0.0079 0.0020  
 Mercury -119437-09-24 02:53 J -41902674.38 -41902674.38 -41902674.34 0.0060 0.0060  
 Mercury -119437-12-21 03:51 J -41902586.41 -41902586.34 -41902586.22 0.0060 0.0053  
 Mercury -119436-03-19 05:17 J -41902498.39 -41902498.28 -41902498.13 0.0060 0.0045  
 Mercury -119436-06-15 06:44 J -41902410.35 -41902410.22 -41902410.05 0.0060 0.0036  
 Mercury -119436-09-11 07:56 J -41902322.32 -41902322.17 -41902321.98 0.0061 0.0029  
 Mercury -119436-12-08 09:22 J -41902234.27 -41902234.11 -41902233.91 0.0061 0.0021  
 Mercury -119435-03-06 11:03 J -41902146.22 -41902146.04 -41902145.85 0.0061 0.0012  
 Mercury -119435-06-02 12:15 J -41902058.17 -41902057.99 -41902057.79 0.0061 0.0004  
 Mercury -119435-08-29 13:41 J -41901970.12 -41901969.93 -41901969.74 0.0061 0.0004  
 Mercury -119435-11-25 14:53 J -41901882.06 -41901881.88 -41901881.69 0.0061 0.0012  
 Mercury -119434-02-21 16:20 J -41901794.00 -41901793.82 -41901793.64 0.0061 0.0020  
 Mercury -119434-05-20 17:32 J -41901705.93 -41901705.77 -41901705.60 0.0061 0.0028  
 Mercury -119434-08-16 18:58 J -41901617.86 -41901617.71 -41901617.56 0.0061 0.0037  
 Mercury -119434-11-12 19:41 J -41901529.78 -41901529.68 -41901529.52 0.0061 0.0046  
 Mercury -119433-02-08 21:08 J -41901441.69 -41901441.62 -41901441.50 0.0061 0.0053  
 Mercury -119433-05-06 23:03 J -41901353.54 -41901353.54 -41901353.54 0.0061 0.0061  
 Earth -119428-11-22 23:03 J -41899327.73 -41899327.54 -41899327.35 0.0063 0.0044  
 Moon -119428-11-23 01:27 J -41899327.63 -41899327.44 -41899327.23 0.0063 0.0041 \*  
 Moon -119427-11-24 08:39 J -41898961.38 -41898961.14 -41898960.89 0.0063 0.0028  
 Earth -119427-11-24 12:01 J -41898961.22 -41898961.00 -41898960.75 0.0063 0.0031 \*  
 Mars -119423-08-24 07:41 J -41897592.43 -41897592.18 -41897591.89 0.0065 0.0029  
 Venus -119421-03-23 17:32 J -41897014.94 -41897014.77 -41897014.58 0.0065 0.0040  
 Venus -119421-11-03 23:03 J -41896789.77 -41896789.54 -41896789.31 0.0065 0.0004  
 Venus -119420-06-17 04:20 J -41896564.47 -41896564.32 -41896564.15 0.0066 0.0047  
 Mercury -119343-01-16 17:46 J -41868591.79 -41868591.76 -41868591.70 0.0084 0.0078  
 Mercury -119343-04-14 19:13 J -41868503.78 -41868503.70 -41868503.60 0.0084 0.0063  
 Mercury -119343-07-11 20:25 J -41868415.75 -41868415.65 -41868415.52 0.0084 0.0048  
 Mercury -119343-10-07 22:05 J -41868327.70 -41868327.58 -41868327.45 0.0084 0.0031



Mercury -119342-01-03 23:17 J -41868239.66 -41868239.53 -41868239.39 0.0084 0.0016  
 Mercury -119342-04-02 00:44 J -41868151.60 -41868151.47 -41868151.33 0.0084 0.0002  
 Mercury -119342-06-29 02:10 J -41868063.55 -41868063.41 -41868063.28 0.0084 0.0015  
 Mercury -119342-09-25 03:22 J -41867975.48 -41867975.36 -41867975.23 0.0084 0.0030  
 Mercury -119342-12-22 04:34 J -41867887.41 -41867887.31 -41867887.19 0.0083 0.0046  
 Mercury -119341-03-19 06:01 J -41867799.34 -41867799.25 -41867799.15 0.0083 0.0060  
 Mercury -119341-06-15 07:13 J -41867711.25 -41867711.20 -41867711.14 0.0083 0.0076  
 Earth -119338-05-20 11:03 J -41866642.20 -41866642.04 -41866641.83 0.0082 0.0055  
 Moon -119338-05-20 13:56 J -41866642.07 -41866641.92 -41866641.72 0.0082 0.0059 \*  
 Venus -119334-04-10 12:44 J -41865221.12 -41865220.97 -41865220.82 0.0079 0.0056  
 Venus -119334-11-21 21:22 J -41864995.82 -41864995.61 -41864995.40 0.0079 0.0015  
 Mercury -119190-08-07 13:27 J -41812505.96 -41812505.94 -41812505.86 0.0060 0.0059  
 Mercury -119190-11-03 14:53 J -41812417.96 -41812417.88 -41812417.75 0.0060 0.0051  
 Mercury -119189-01-30 16:20 J -41812329.93 -41812329.82 -41812329.66 0.0060 0.0043  
 Mercury -119189-04-27 17:46 J -41812241.90 -41812241.76 -41812241.59 0.0060 0.0035  
 Mercury -119189-07-24 19:13 J -41812153.86 -41812153.70 -41812153.52 0.0060 0.0027  
 Mercury -119189-10-20 20:25 J -41812065.82 -41812065.65 -41812065.45 0.0061 0.0019  
 Mercury -119188-01-16 21:51 J -41811977.77 -41811977.59 -41811977.39 0.0061 0.0011  
 Mercury -119188-04-14 23:17 J -41811889.71 -41811889.53 -41811889.33 0.0061 0.0003  
 Mercury -119188-07-12 00:44 J -41811801.66 -41811801.47 -41811801.28 0.0061 0.0006  
 Mercury -119188-10-08 01:56 J -41811713.60 -41811713.42 -41811713.23 0.0061 0.0014  
 Mercury -119187-01-04 03:08 J -41811625.54 -41811625.37 -41811625.18 0.0061 0.0022  
 Mercury -119187-04-02 04:20 J -41811537.47 -41811537.32 -41811537.14 0.0061 0.0030  
 Mercury -119187-06-29 05:46 J -41811449.39 -41811449.26 -41811449.10 0.0061 0.0038  
 Mercury -119187-09-25 07:13 J -41811361.31 -41811361.20 -41811361.07 0.0061 0.0046  
 Mercury -119187-12-22 08:39 J -41811273.22 -41811273.14 -41811273.05 0.0061 0.0055  
 Earth -119181-11-24 09:37 J -41809109.30 -41809109.10 -41809108.87 0.0063 0.0038  
 Moon -119181-11-24 12:29 J -41809109.17 -41809108.98 -41809108.76 0.0063 0.0038 \*  
 Moon -119180-11-25 19:27 J -41808742.89 -41808742.69 -41808742.45 0.0063 0.0036  
 Earth -119180-11-25 23:17 J -41808742.73 -41808742.53 -41808742.30 0.0063 0.0037 \*

Venus	-119175-12-02 14:25 J	-41806910.06	-41806909.90	-41806909.73	0.0065	0.0045
Venus	-119174-07-15 19:41 J	-41806684.91	-41806684.68	-41806684.45	0.0065	0.0002
Venus	-119173-02-26 00:44 J	-41806459.63	-41806459.47	-41806459.27	0.0066	0.0042
Mercury	-119097-11-29 06:01 J	-41778423.29	-41778423.25	-41778423.19	0.0084	0.0078
Mercury	-119096-02-25 07:13 J	-41778335.28	-41778335.20	-41778335.09	0.0084	0.0063
Mercury	-119096-05-24 08:53 J	-41778247.24	-41778247.13	-41778247.02	0.0084	0.0047
Mercury	-119096-08-20 10:05 J	-41778159.20	-41778159.08	-41778158.95	0.0084	0.0031
Mercury	-119096-11-16 11:32 J	-41778071.15	-41778071.02	-41778070.89	0.0084	0.0016
Mercury	-119095-02-12 12:44 J	-41777983.10	-41777982.97	-41777982.83	0.0084	0.0003
Mercury	-119095-05-11 14:10 J	-41777895.04	-41777894.91	-41777894.78	0.0084	0.0015
Mercury	-119095-08-07 15:22 J	-41777806.98	-41777806.86	-41777806.73	0.0084	0.0030
Mercury	-119095-11-03 16:34 J	-41777718.91	-41777718.81	-41777718.69	0.0083	0.0046
Mercury	-119094-01-30 18:01 J	-41777630.84	-41777630.75	-41777630.65	0.0083	0.0060
Mercury	-119094-04-28 19:13 J	-41777542.75	-41777542.70	-41777542.64	0.0083	0.0075
Earth	-119091-05-22 00:44 J	-41776423.67	-41776423.47	-41776423.25	0.0081	0.0043
Moon	-119091-05-22 04:20 J	-41776423.54	-41776423.32	-41776423.10	0.0081	0.0039 *
Venus	-119088-12-19 07:56 J	-41775116.24	-41775116.17	-41775116.06	0.0079	0.0072
Venus	-119087-08-01 17:03 J	-41774891.00	-41774890.79	-41774890.58	0.0079	0.0001
Venus	-119086-03-15 00:58 J	-41774665.52	-41774665.46	-41774665.34	0.0079	0.0071

# 119TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 119th millennium BCE.**

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
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TRANSIT

TIME

Mercury -118943-09-16 00:58 J -41722249.54 -41722249.46 -41722249.37 0.0060 0.0054

Mercury -118943-12-13 02:25 J -41722161.52 -41722161.40 -41722161.28 0.0060 0.0046

Mercury -118942-03-11 03:51 J -41722073.49 -41722073.34 -41722073.20 0.0060 0.0038

Mercury -118942-06-07 05:03 J -41721985.45 -41721985.29 -41721985.12 0.0060 0.0030

Mercury -118942-09-03 06:29 J -41721897.41 -41721897.23 -41721897.06 0.0061 0.0022

Mercury -118942-11-30 07:41 J -41721809.36 -41721809.18 -41721808.99 0.0061 0.0014

Mercury -118941-02-26 09:08 J -41721721.31 -41721721.12 -41721720.93 0.0061 0.0006

Mercury -118941-05-24 10:20 J -41721633.26 -41721633.07 -41721632.88 0.0061 0.0002

Mercury -118941-08-20 11:46 J -41721545.20 -41721545.01 -41721544.82 0.0061 0.0010

Mercury -118941-11-16 12:58 J -41721457.14 -41721456.96 -41721456.77 0.0061 0.0018

Mercury -118940-02-12 14:25 J -41721369.07 -41721368.90 -41721368.73 0.0061 0.0026

Mercury -118940-05-11 15:37 J -41721281.00 -41721280.85 -41721280.69 0.0061 0.0034

Mercury -118940-08-07 17:03 J -41721192.92 -41721192.79 -41721192.65 0.0061 0.0043

Mercury -118940-11-03 17:46 J -41721104.83 -41721104.76 -41721104.63 0.0061 0.0051

Mercury -118939-01-30 19:13 J -41721016.72 -41721016.70 -41721016.63 0.0061 0.0059

Earth -118934-11-26 15:37 J -41718891.02 -41718890.85 -41718890.64 0.0063 0.0044

Moon -118934-11-26 17:03 J -41718890.96 -41718890.79 -41718890.61 0.0063 0.0047 \*

Moon -118933-11-27 01:41 J -41718524.64 -41718524.43 -41718524.17 0.0063 0.0034

Earth -118933-11-27 05:03 J -41718524.51 -41718524.29 -41718524.04 0.0063 0.0031 \*

Venus -118928-08-12 07:41 J -41716805.25 -41716805.18 -41716805.09 0.0065 0.0060

Venus -118927-03-25 12:44 J -41716580.17 -41716579.97 -41716579.73 0.0065 0.0019

Venus -118927-11-05 18:15 J -41716354.94 -41716354.74 -41716354.51 0.0066 0.0026

Mercury -118850-10-12 17:17 J -41688254.78 -41688254.78 -41688254.77 0.0085 0.0084

Mercury -118849-01-08 18:44 J -41688166.80 -41688166.72 -41688166.64 0.0084 0.0069

Mercury -118849-04-05 19:56 J -41688078.77 -41688078.67 -41688078.56 0.0084 0.0053

Mercury -118849-07-02 21:08 J -41687990.73 -41687990.62 -41687990.49 0.0084 0.0038

Mercury -118849-09-28 22:34 J -41687902.68 -41687902.56 -41687902.42 0.0084 0.0023

Mercury -118849-12-26 00:01 J -41687814.63 -41687814.50 -41687814.36 0.0084 0.0007

Mercury -118848-03-24 01:13 J -41687726.58 -41687726.45 -41687726.31 0.0084 0.0009

Mercury -118848-06-20 02:25 J -41687638.52 -41687638.40 -41687638.26 0.0084 0.0024

Mercury -118848-09-16 03:51 J -41687550.46 -41687550.34 -41687550.21 0.0083 0.0039

Mercury -118848-12-13 05:03 J -41687462.38 -41687462.29 -41687462.18 0.0083 0.0054

Mercury -118847-03-11 06:29 J -41687374.30 -41687374.23 -41687374.15 0.0083 0.0068

Earth -118844-05-23 09:51 J -41686205.29 -41686205.09 -41686204.89 0.0081 0.0047

Moon -118844-05-23 12:58 J -41686205.14 -41686204.96 -41686204.74 0.0081 0.0048 \*

Venus -118840-04-11 10:34 J -41684786.26 -41684786.06 -41684785.86 0.0079 0.0027

Venus -118840-11-22 19:13 J -41684560.88 -41684560.70 -41684560.53 0.0079 0.0043

Mercury -118696-07-29 09:37 J -41632081.11 -41632081.10 -41632081.06 0.0060 0.0060

Mercury -118696-10-25 11:03 J -41631993.12 -41631993.04 -41631992.93 0.0060 0.0052

Mercury -118695-01-21 12:29 J -41631905.10 -41631904.98 -41631904.84 0.0060 0.0044

Mercury -118695-04-19 13:56 J -41631817.07 -41631816.92 -41631816.76 0.0060 0.0036

Mercury -118695-07-16 14:53 J -41631729.03 -41631728.88 -41631728.69 0.0060 0.0028

Mercury -118695-10-12 16:20 J -41631640.99 -41631640.82 -41631640.63 0.0060 0.0020

Mercury -118694-01-08 18:01 J -41631552.94 -41631552.75 -41631552.56 0.0061 0.0012

Mercury -118694-04-06 19:13 J -41631464.89 -41631464.70 -41631464.51 0.0061 0.0004

Mercury -118694-07-03 20:39 J -41631376.83 -41631376.64 -41631376.45 0.0061 0.0004

Mercury -118694-09-29 21:51 J -41631288.77 -41631288.59 -41631288.40 0.0061 0.0012

Mercury -118694-12-26 23:17 J -41631200.71 -41631200.53 -41631200.35 0.0061 0.0020

Mercury -118693-03-24 00:29 J -41631112.64 -41631112.48 -41631112.30 0.0061 0.0028

Mercury -118693-06-20 01:56 J -41631024.57 -41631024.42 -41631024.26 0.0061 0.0036

Mercury -118693-09-16 03:22 J -41630936.49 -41630936.36 -41630936.23 0.0061 0.0044

Mercury -118693-12-13 04:05 J -41630848.40 -41630848.33 -41630848.21 0.0061 0.0053

Mercury -118692-03-11 05:46 J -41630760.26 -41630760.26 -41630760.23 0.0061 0.0061

Moon -118687-11-27 19:13 J -41628672.83 -41628672.70 -41628672.55 0.0063 0.0052

Earth -118687-11-27 18:44 J -41628672.81 -41628672.72 -41628672.56 0.0063 0.0056 \*

Moon -118686-11-29 06:58 J -41628306.48 -41628306.21 -41628305.94 0.0063 0.0016

Earth -118686-11-29 08:39 J -41628306.38 -41628306.14 -41628305.86 0.0063 0.0019 \*

Mars -118682-09-14 07:56 J -41626921.46 -41626921.17 -41626920.86 0.0065 0.0008

Venus -118681-12-03 04:34 J -41626475.47 -41626475.31 -41626475.11 0.0065 0.0039

Venus -118680-07-16 10:20 J -41626250.30 -41626250.07 -41626249.84 0.0065 0.0004

Venus -118679-02-26 15:08 J -41626025.00 -41626024.87 -41626024.68 0.0066 0.0048

Mercury -118603-11-21 04:34 J -41597998.31 -41597998.31 -41597998.28 0.0084 0.0084

Mercury -118602-02-17 06:01 J -41597910.32 -41597910.25 -41597910.16 0.0084 0.0068

Mercury -118602-05-16 07:27 J -41597822.29 -41597822.19 -41597822.08 0.0084 0.0053

Mercury -118602-08-12 08:39 J -41597734.25 -41597734.14 -41597734.01 0.0084 0.0038

Mercury -118602-11-08 10:05 J -41597646.21 -41597646.08 -41597645.95 0.0084 0.0022

Mercury -118601-02-04 11:32 J -41597558.16 -41597558.02 -41597557.89 0.0084 0.0007

Mercury -118601-05-02 12:44 J -41597470.10 -41597469.97 -41597469.83 0.0084 0.0009

Mercury -118601-07-29 13:56 J -41597382.04 -41597381.92 -41597381.78 0.0084 0.0024

Mercury -118601-10-25 15:22 J -41597293.98 -41597293.86 -41597293.74 0.0083 0.0039

Mercury -118600-01-21 16:34 J -41597205.91 -41597205.81 -41597205.70 0.0083 0.0054

Mercury -118600-04-19 18:01 J -41597117.83 -41597117.75 -41597117.68 0.0083 0.0069

Earth -118597-05-24 12:15 J -41595987.08 -41595986.99 -41595986.84 0.0082 0.0072

Moon -118597-05-24 15:22 J -41595986.94 -41595986.86 -41595986.74 0.0082 0.0074 \*

Moon -118596-05-26 11:46 J -41595620.03 -41595620.01 -41595619.92 0.0081 0.0079

Earth -118596-05-26 14:53 J -41595619.92 -41595619.88 -41595619.76 0.0081 0.0077 \*

Mars -118594-03-16 15:22 J -41594961.13 -41594960.86 -41594960.55 0.0080 0.0040

Venus -118594-12-20 23:46 J -41594681.59 -41594681.51 -41594681.40 0.0079 0.0071

Venus -118593-08-02 08:39 J -41594456.35 -41594456.14 -41594455.92 0.0079 0.0002

Venus -118592-03-15 16:49 J -41594230.86 -41594230.80 -41594230.69 0.0079 0.0072

Mercury -118449-12-03 19:41 J -41541736.73 -41541736.68 -41541736.59 0.0060 0.0056

Mercury -118448-03-01 21:08 J -41541648.72 -41541648.62 -41541648.49 0.0060 0.0048

Mercury -118448-05-28 22:34 J -41541560.69 -41541560.56 -41541560.41 0.0060 0.0040

Mercury -118448-08-25 00:00 J -41541472.66 -41541472.50 -41541472.33 0.0060 0.0032

Mercury -118448-11-21 01:27 J -41541384.61 -41541384.44 -41541384.26 0.0060 0.0024

Mercury -118447-02-17 02:39 J -41541296.57 -41541296.39 -41541296.20 0.0061 0.0016

Mercury -118447-05-16 04:05 J -41541208.52 -41541208.33 -41541208.14 0.0061 0.0008

Mercury -118447-08-12 05:32 J -41541120.46 -41541120.27 -41541120.08 0.0061 0.0001

Mercury -118447-11-08 06:44 J -41541032.40 -41541032.22 -41541032.03 0.0061 0.0008

Mercury -118446-02-04 08:10 J -41540944.34 -41540944.16 -41540943.98 0.0061 0.0016

Mercury -118446-05-03 09:36 J -41540856.28 -41540856.10 -41540855.93 0.0061 0.0024

Mercury -118446-07-30 10:48 J -41540768.21 -41540768.05 -41540767.89 0.0061 0.0032

Mercury -118446-10-26 11:46 J -41540680.13 -41540680.01 -41540679.85 0.0061 0.0041

Mercury -118445-01-22 12:58 J -41540592.05 -41540591.96 -41540591.82 0.0061 0.0049

Mercury -118445-04-19 14:24 J -41540503.94 -41540503.90 -41540503.81 0.0061 0.0057

Earth -118439-11-30 07:27 J -41538088.45 -41538088.19 -41538087.91 0.0063 0.0006

Moon -118439-11-30 08:10 J -41538088.44 -41538088.16 -41538087.88 0.0063 0.0004 \*

Venus -118433-03-25 22:20 J -41536145.76 -41536145.57 -41536145.35 0.0065 0.0030

Venus -118433-11-06 03:51 J -41535920.56 -41535920.34 -41535920.11 0.0065 0.0014

Venus -118432-06-19 08:39 J -41535695.22 -41535695.14 -41535695.00 0.0066 0.0058

Mercury -118355-03-28 16:20 J -41507653.87 -41507653.82 -41507653.76 0.0084 0.0076

Mercury -118355-06-24 17:32 J -41507565.85 -41507565.77 -41507565.67 0.0084 0.0061

Mercury -118355-09-20 18:58 J -41507477.82 -41507477.71 -41507477.59 0.0084 0.0045

Mercury -118355-12-17 20:10 J -41507389.77 -41507389.66 -41507389.52 0.0084 0.0030

Mercury -118354-03-15 21:36 J -41507301.73 -41507301.60 -41507301.46 0.0084 0.0015

Mercury -118354-06-11 23:03 J -41507213.68 -41507213.54 -41507213.40 0.0084 0.0001

Mercury -118354-09-08 00:15 J -41507125.62 -41507125.49 -41507125.35 0.0084 0.0016

Mercury -118354-12-05 01:27 J -41507037.56 -41507037.44 -41507037.30 0.0084 0.0032

Mercury -118353-03-02 02:39 J -41506949.49 -41506949.39 -41506949.26 0.0083 0.0047

Mercury -118353-05-29 04:05 J -41506861.41 -41506861.33 -41506861.23 0.0083 0.0061

Mercury -118353-08-25 05:17 J -41506773.32 -41506773.28 -41506773.22 0.0083 0.0076

Moon -118349-05-27 10:48 J -41505402.28 -41505402.05 -41505401.81 0.0081 0.0031

Earth -118349-05-27 13:12 J -41505402.17 -41505401.95 -41505401.72 0.0081 0.0034 \*

Venus -118346-04-12 18:44 J -41504351.84 -41504351.72 -41504351.54 0.0079 0.0057

Venus -118346-11-24 04:05 J -41504126.54 -41504126.33 -41504126.12 0.0079 0.0016

Mercury -118201-04-10 05:32 J -41451392.35 -41451392.27 -41451392.18 0.0060 0.0053

Mercury -118201-07-07 06:58 J -41451304.33 -41451304.21 -41451304.08 0.0060 0.0046

Mercury -118201-10-03 08:24 J -41451216.30 -41451216.15 -41451216.00 0.0060 0.0038

Mercury -118201-12-30 09:08 J -41451128.26 -41451128.12 -41451127.93 0.0060 0.0031

Mercury -118200-03-28 10:34 J -41451040.22 -41451040.06 -41451039.86 0.0060 0.0023

Mercury -118200-06-24 12:00 J -41450952.17 -41450952.00 -41450951.80 0.0060 0.0015

Mercury -118200-09-20 13:27 J -41450864.12 -41450863.94 -41450863.74 0.0061 0.0007

Mercury -118200-12-17 14:53 J -41450776.07 -41450775.88 -41450775.68 0.0061 0.0002

Mercury -118199-03-15 16:20 J -41450688.01 -41450687.82 -41450687.63 0.0061 0.0010

Mercury -118199-06-11 17:32 J -41450599.95 -41450599.77 -41450599.58 0.0061 0.0018

Mercury -118199-09-07 18:44 J -41450511.88 -41450511.72 -41450511.54 0.0061 0.0026

Mercury -118199-12-04 20:10 J -41450423.81 -41450423.66 -41450423.49 0.0061 0.0034

Mercury -118198-03-02 21:22 J -41450335.73 -41450335.61 -41450335.46 0.0061 0.0042

Mercury -118198-05-29 22:48 J -41450247.64 -41450247.55 -41450247.43 0.0061 0.0050

Mercury -118198-08-26 00:15 J -41450159.53 -41450159.49 -41450159.43 0.0061 0.0059

Earth -118192-12-01 03:08 J -41447870.57 -41447870.37 -41447870.13 0.0063 0.0036

Moon -118192-12-01 03:22 J -41447870.57 -41447870.36 -41447870.10 0.0063 0.0035 \*

Earth -118191-12-02 16:34 J -41447504.00 -41447503.81 -41447503.57 0.0063 0.0039

Moon -118191-12-02 17:46 J -41447503.95 -41447503.76 -41447503.53 0.0063 0.0037 \*

Mars -118187-05-14 15:08 J -41446245.12 -41446244.87 -41446244.59 0.0065 0.0032

Venus -118186-07-17 14:10 J -41445816.10 -41445815.91 -41445815.68 0.0065 0.0025

Venus -118185-02-27 19:41 J -41445590.89 -41445590.68 -41445590.45 0.0065 0.0018

Venus -118185-10-10 00:58 J -41445365.51 -41445365.46 -41445365.36 0.0066 0.0062

Mercury -118108-08-03 02:39 J -41417309.43 -41417309.39 -41417309.32 0.0084 0.0076

Mercury -118108-10-30 04:20 J -41417221.41 -41417221.32 -41417221.23 0.0084 0.0060

Mercury -118107-01-26 05:32 J -41417133.38 -41417133.27 -41417133.15 0.0084 0.0045

Mercury -118107-04-24 06:58 J -41417045.33 -41417045.21 -41417045.08 0.0084 0.0030

Mercury -118107-07-21 08:10 J -41416957.29 -41416957.16 -41416957.02 0.0084 0.0015

Mercury -118107-10-17 09:36 J -41416869.23 -41416869.10 -41416868.96 0.0084 0.0001

Mercury -118106-01-13 11:03 J -41416781.18 -41416781.04 -41416780.91 0.0084 0.0016

Mercury -118106-04-11 12:15 J -41416693.11 -41416692.99 -41416692.86 0.0084 0.0031

Mercury -118106-07-08 13:27 J -41416605.05 -41416604.94 -41416604.82 0.0083 0.0046

Mercury -118106-10-04 14:53 J -41416516.97 -41416516.88 -41416516.79 0.0083 0.0061

Mercury -118106-12-31 16:05 J -41416428.88 -41416428.83 -41416428.77 0.0083 0.0075

Moon -118102-05-29 02:39 J -41415184.63 -41415184.39 -41415184.15 0.0081 0.0026

Earth -118102-05-29 05:17 J -41415184.50 -41415184.28 -41415184.03 0.0081 0.0028 \*

Mars -118100-11-12 22:48 J -41414285.87 -41414285.55 -41414285.21 0.0080 0.0008

Venus -118099-08-03 11:03 J -41414022.18 -41414022.04 -41414021.88 0.0079 0.0057

Venus -118098-03-16 19:56 J -41413796.87 -41413796.67 -41413796.46 0.0079 0.0015

# 118TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 118th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-117954-08-16 13:12 J	-41361047.98	-41361047.95	-41361047.86	0.0060	0.0057		
Mercury	-117954-11-12 14:39 J	-41360959.98	-41360959.89	-41360959.76	0.0060	0.0049		
Mercury	-117953-02-08 16:05 J	-41360871.95	-41360871.83	-41360871.67	0.0060	0.0041		
Mercury	-117953-05-06 17:32 J	-41360783.92	-41360783.77	-41360783.60	0.0060	0.0034		
Mercury	-117953-08-02 18:58 J	-41360695.87	-41360695.71	-41360695.53	0.0060	0.0026		
Mercury	-117953-10-29 20:24 J	-41360607.83	-41360607.65	-41360607.46	0.0060	0.0018		
Mercury	-117952-01-25 21:51 J	-41360519.78	-41360519.59	-41360519.40	0.0061	0.0010		
Mercury	-117952-04-23 23:03 J	-41360431.73	-41360431.54	-41360431.34	0.0061	0.0002		
Mercury	-117952-07-21 00:29 J	-41360343.67	-41360343.48	-41360343.29	0.0061	0.0006		
Mercury	-117952-10-17 01:41 J	-41360255.61	-41360255.43	-41360255.24	0.0061	0.0015		
Mercury	-117951-01-13 02:53 J	-41360167.54	-41360167.38	-41360167.19	0.0061	0.0023		



Mercury -117951-04-11 04:05 J -41360079.48 -41360079.33 -41360079.15 0.0061 0.0031

Mercury -117951-07-08 05:17 J -41359991.40 -41359991.28 -41359991.11 0.0061 0.0039

Mercury -117951-10-04 06:44 J -41359903.32 -41359903.22 -41359903.08 0.0061 0.0047

Mercury -117951-12-31 08:10 J -41359815.22 -41359815.16 -41359815.06 0.0061 0.0055

Earth -117944-12-03 08:39 J -41357286.41 -41357286.14 -41357285.87 0.0063 0.0004

Moon -117944-12-03 10:05 J -41357286.34 -41357286.08 -41357285.82 0.0063 0.0001 \*

Venus -117939-11-07 03:22 J -41355486.54 -41355486.36 -41355486.14 0.0065 0.0031

Venus -117938-06-20 08:53 J -41355261.35 -41355261.13 -41355260.89 0.0065 0.0012

Venus -117937-01-31 13:56 J -41355036.02 -41355035.92 -41355035.78 0.0065 0.0056

Mercury -117861-12-08 12:15 J -41326964.99 -41326964.99 -41326964.95 0.0084 0.0084

Mercury -117860-03-06 13:56 J -41326877.00 -41326876.92 -41326876.84 0.0084 0.0068

Mercury -117860-06-02 15:08 J -41326788.97 -41326788.87 -41326788.76 0.0084 0.0052

Mercury -117860-08-29 16:34 J -41326700.93 -41326700.81 -41326700.69 0.0084 0.0037

Mercury -117860-11-25 17:46 J -41326612.88 -41326612.76 -41326612.62 0.0084 0.0022

Mercury -117859-02-21 19:12 J -41326524.83 -41326524.70 -41326524.56 0.0084 0.0007

Mercury -117859-05-20 20:39 J -41326436.78 -41326436.64 -41326436.51 0.0084 0.0009

Mercury -117859-08-16 21:51 J -41326348.72 -41326348.59 -41326348.46 0.0084 0.0024

Mercury -117859-11-12 23:03 J -41326260.65 -41326260.54 -41326260.41 0.0083 0.0039

Mercury -117858-02-09 00:15 J -41326172.58 -41326172.49 -41326172.38 0.0083 0.0054

Mercury -117858-05-08 01:27 J -41326084.50 -41326084.44 -41326084.35 0.0083 0.0069

Mercury -117858-08-04 02:53 J -41325996.38 -41325996.38 -41325996.37 0.0083 0.0083

Earth -117854-05-31 18:58 J -41324599.90 -41324599.71 -41324599.48 0.0081 0.0043

Moon -117854-05-31 22:34 J -41324599.76 -41324599.56 -41324599.33 0.0081 0.0040 \*

Venus -117852-11-24 00:00 J -41323692.58 -41323692.50 -41323692.37 0.0080 0.0070

Venus -117851-07-07 09:08 J -41323467.33 -41323467.12 -41323466.90 0.0079 0.0004

Venus -117850-02-17 17:17 J -41323241.83 -41323241.78 -41323241.69 0.0079 0.0074

Mercury -117706-03-19 22:20 J -41270615.63 -41270615.57 -41270615.46 0.0060 0.0055

Mercury -117706-06-16 00:00 J -41270527.61 -41270527.50 -41270527.37 0.0060 0.0046

Mercury -117706-09-12 01:27 J -41270439.58 -41270439.44 -41270439.29 0.0060 0.0039

Mercury -117706-12-09 02:53 J -41270351.54 -41270351.38 -41270351.21 0.0060 0.0031

Mercury -117705-03-06 04:20 J -41270263.50 -41270263.32 -41270263.15 0.0060 0.0023

Mercury -117705-06-02 05:17 J -41270175.45 -41270175.28 -41270175.08 0.0060 0.0015

Mercury -117705-08-29 06:44 J -41270087.40 -41270087.22 -41270087.02 0.0060 0.0007

Mercury -117705-11-25 08:10 J -41269999.35 -41269999.16 -41269998.97 0.0061 0.0001

Mercury -117704-02-21 09:36 J -41269911.29 -41269911.10 -41269910.91 0.0061 0.0009

Mercury -117704-05-20 10:48 J -41269823.23 -41269823.05 -41269822.86 0.0061 0.0017

Mercury -117704-08-16 12:00 J -41269735.16 -41269735.00 -41269734.82 0.0061 0.0025

Mercury -117704-11-12 13:12 J -41269647.09 -41269646.95 -41269646.77 0.0061 0.0033

Mercury -117703-02-08 14:39 J -41269559.02 -41269558.89 -41269558.74 0.0061 0.0041

Mercury -117703-05-07 15:51 J -41269470.93 -41269470.84 -41269470.71 0.0061 0.0049

Mercury -117703-08-03 17:17 J -41269382.83 -41269382.78 -41269382.70 0.0061 0.0057

Earth -117697-12-03 20:53 J -41267068.76 -41267068.63 -41267068.44 0.0063 0.0050

Moon -117697-12-03 22:48 J -41267068.67 -41267068.55 -41267068.35 0.0063 0.0050 \*

Moon -117696-12-05 07:56 J -41266702.41 -41266702.17 -41266701.90 0.0063 0.0024

Earth -117696-12-05 10:48 J -41266702.27 -41266702.05 -41266701.77 0.0063 0.0025 \*

Mars -117692-01-11 00:58 J -41265569.76 -41265569.46 -41265569.16 0.0064 0.0001

Venus -117691-02-27 15:08 J -41265157.03 -41265156.87 -41265156.68 0.0065 0.0041

Venus -117691-10-10 20:53 J -41264931.86 -41264931.63 -41264931.40 0.0065 0.0002

Venus -117690-05-24 02:10 J -41264706.58 -41264706.41 -41264706.24 0.0065 0.0045

Mercury -117613-07-11 22:20 J -41236532.58 -41236532.57 -41236532.53 0.0084 0.0082

Mercury -117613-10-07 23:46 J -41236444.58 -41236444.51 -41236444.42 0.0084 0.0067

Mercury -117612-01-04 01:12 J -41236356.55 -41236356.45 -41236356.34 0.0084 0.0051

Mercury -117612-04-02 02:24 J -41236268.51 -41236268.40 -41236268.27 0.0084 0.0036

Mercury -117612-06-29 03:51 J -41236180.47 -41236180.34 -41236180.21 0.0084 0.0021

Mercury -117612-09-25 05:17 J -41236092.42 -41236092.28 -41236092.15 0.0084 0.0006

Mercury -117612-12-22 06:29 J -41236004.36 -41236004.23 -41236004.09 0.0084 0.0009

Mercury -117611-03-20 07:41 J -41235916.30 -41235916.18 -41235916.04 0.0084 0.0025

Mercury -117611-06-16 08:53 J -41235828.24 -41235828.13 -41235828.00 0.0083 0.0040

Mercury -117611-09-12 10:20 J -41235740.17 -41235740.07 -41235739.96 0.0083 0.0054

Mercury -117611-12-09 11:32 J -41235652.09 -41235652.02 -41235651.94 0.0083 0.0069

Earth -117607-06-01 01:41 J -41234382.62 -41234382.43 -41234382.23 0.0081 0.0051  
 Moon -117607-06-01 04:48 J -41234382.49 -41234382.30 -41234382.08 0.0081 0.0047 \*  
 Venus -117604-10-27 19:27 J -41233137.88 -41233137.69 -41233137.48 0.0079 0.0023  
 Venus -117603-06-10 04:20 J -41232912.49 -41232912.32 -41232912.15 0.0079 0.0048  
 Mercury -117459-10-21 06:15 J -41180183.29 -41180183.24 -41180183.16 0.0060 0.0056  
 Mercury -117458-01-17 07:41 J -41180095.28 -41180095.18 -41180095.05 0.0060 0.0048  
 Mercury -117458-04-15 09:08 J -41180007.25 -41180007.12 -41180006.97 0.0060 0.0041  
 Mercury -117458-07-12 10:34 J -41179919.22 -41179919.06 -41179918.90 0.0060 0.0033  
 Mercury -117458-10-08 11:32 J -41179831.17 -41179831.02 -41179830.83 0.0060 0.0026  
 Mercury -117457-01-04 12:58 J -41179743.13 -41179742.96 -41179742.76 0.0060 0.0018  
 Mercury -117457-04-01 14:24 J -41179655.08 -41179654.90 -41179654.70 0.0060 0.0010  
 Mercury -117457-06-28 16:05 J -41179567.02 -41179566.83 -41179566.64 0.0061 0.0001  
 Mercury -117457-09-24 17:17 J -41179478.97 -41179478.78 -41179478.59 0.0061 0.0007  
 Mercury -117457-12-21 18:29 J -41179390.91 -41179390.73 -41179390.54 0.0061 0.0015  
 Mercury -117456-03-19 19:41 J -41179302.84 -41179302.68 -41179302.49 0.0061 0.0023  
 Mercury -117456-06-15 21:08 J -41179214.77 -41179214.62 -41179214.44 0.0061 0.0031  
 Mercury -117456-09-11 22:20 J -41179126.70 -41179126.57 -41179126.41 0.0061 0.0039  
 Mercury -117456-12-08 23:32 J -41179038.62 -41179038.52 -41179038.38 0.0061 0.0047  
 Mercury -117455-03-07 00:58 J -41178950.52 -41178950.46 -41178950.36 0.0061 0.0055  
 Moon -117449-12-05 16:34 J -41176485.04 -41176484.81 -41176484.56 0.0063 0.0029  
 Earth -117449-12-05 19:27 J -41176484.89 -41176484.69 -41176484.43 0.0063 0.0033 \*  
 Earth -117448-12-07 09:22 J -41176118.29 -41176118.11 -41176117.89 0.0063 0.0042  
 Moon -117448-12-07 12:58 J -41176118.15 -41176117.96 -41176117.72 0.0063 0.0039 \*  
 Venus -117444-06-20 00:15 J -41174827.55 -41174827.49 -41174827.38 0.0065 0.0060  
 Venus -117443-01-31 05:32 J -41174602.47 -41174602.27 -41174602.03 0.0065 0.0018  
 Venus -117443-09-13 11:03 J -41174377.24 -41174377.04 -41174376.81 0.0065 0.0026  
 Mercury -117365-05-11 09:22 J -41146012.18 -41146012.11 -41146012.04 0.0084 0.0071  
 Mercury -117365-08-07 10:34 J -41145924.16 -41145924.06 -41145923.95 0.0084 0.0056  
 Mercury -117365-11-03 12:00 J -41145836.12 -41145836.00 -41145835.88 0.0084 0.0040  
 Mercury -117364-01-30 13:12 J -41145748.08 -41145747.95 -41145747.82 0.0084 0.0025

Mercury -117364-04-28 14:39 J -41145660.03 -41145659.89 -41145659.76 0.0084 0.0010

Mercury -117364-07-25 15:51 J -41145571.97 -41145571.84 -41145571.70 0.0084 0.0005

Mercury -117364-10-21 17:03 J -41145483.92 -41145483.79 -41145483.65 0.0084 0.0020

Mercury -117363-01-17 18:29 J -41145395.85 -41145395.73 -41145395.61 0.0083 0.0035

Mercury -117363-04-15 19:41 J -41145307.78 -41145307.68 -41145307.57 0.0083 0.0050

Mercury -117363-07-12 20:53 J -41145219.71 -41145219.63 -41145219.54 0.0083 0.0065

Mercury -117363-10-08 22:05 J -41145131.61 -41145131.58 -41145131.53 0.0083 0.0079

Moon -117359-06-03 04:20 J -41143798.55 -41143798.32 -41143798.07 0.0081 0.0012

Earth -117359-06-03 07:12 J -41143798.44 -41143798.20 -41143797.95 0.0081 0.0010 \*

Mars -117357-10-19 18:58 J -41142928.82 -41142928.71 -41142928.56 0.0080 0.0073

Venus -117356-02-17 03:22 J -41142808.48 -41142808.36 -41142808.19 0.0080 0.0059

Venus -117356-09-30 12:29 J -41142583.18 -41142582.98 -41142582.76 0.0079 0.0014

Mercury -117211-05-24 13:41 J -41089750.93 -41089750.93 -41089750.91 0.0060 0.0060

Mercury -117211-08-20 14:53 J -41089662.96 -41089662.88 -41089662.77 0.0060 0.0052

Mercury -117211-11-16 16:20 J -41089574.94 -41089574.82 -41089574.68 0.0060 0.0045

Mercury -117210-02-12 18:00 J -41089486.91 -41089486.75 -41089486.60 0.0060 0.0037

Mercury -117210-05-11 18:44 J -41089398.87 -41089398.72 -41089398.53 0.0060 0.0030

Mercury -117210-08-07 20:10 J -41089310.82 -41089310.66 -41089310.46 0.0060 0.0022

Mercury -117210-11-03 21:36 J -41089222.77 -41089222.60 -41089222.40 0.0060 0.0014

Mercury -117209-01-30 23:17 J -41089134.72 -41089134.53 -41089134.34 0.0060 0.0005

Mercury -117209-04-28 00:44 J -41089046.67 -41089046.47 -41089046.28 0.0061 0.0003

Mercury -117209-07-25 01:56 J -41088958.61 -41088958.42 -41088958.23 0.0061 0.0011

Mercury -117209-10-21 03:08 J -41088870.54 -41088870.37 -41088870.18 0.0061 0.0019

Mercury -117208-01-17 04:20 J -41088782.48 -41088782.32 -41088782.13 0.0061 0.0027

Mercury -117208-04-15 05:32 J -41088694.40 -41088694.27 -41088694.09 0.0061 0.0035

Mercury -117208-07-12 06:58 J -41088606.33 -41088606.21 -41088606.06 0.0061 0.0043

Mercury -117208-10-08 08:10 J -41088518.24 -41088518.16 -41088518.03 0.0061 0.0051

Mercury -117207-01-04 09:36 J -41088430.13 -41088430.10 -41088430.03 0.0061 0.0059

Earth -117201-12-07 16:20 J -41085901.07 -41085900.82 -41085900.56 0.0063 0.0020

Moon -117201-12-07 19:56 J -41085900.91 -41085900.67 -41085900.40 0.0063 0.0020 \*

Moon -117200-12-09 03:22 J -41085534.47 -41085534.36 -41085534.20 0.0064 0.0055  
 Earth -117200-12-09 06:15 J -41085534.38 -41085534.24 -41085534.10 0.0064 0.0054 \*  
 Venus -117196-05-23 13:27 J -41084273.09 -41084272.94 -41084272.74 0.0065 0.0042  
 Venus -117195-01-03 19:12 J -41084047.93 -41084047.70 -41084047.47 0.0065 0.0001  
 Venus -117195-08-16 23:46 J -41083822.65 -41083822.51 -41083822.32 0.0065 0.0044  
 Mercury -117118-12-13 17:17 J -41055579.79 -41055579.78 -41055579.73 0.0084 0.0083  
 Mercury -117117-03-10 18:58 J -41055491.79 -41055491.71 -41055491.63 0.0084 0.0067  
 Mercury -117117-06-06 20:24 J -41055403.76 -41055403.65 -41055403.55 0.0084 0.0052  
 Mercury -117117-09-02 21:36 J -41055315.72 -41055315.60 -41055315.48 0.0084 0.0036  
 Mercury -117117-11-29 23:03 J -41055227.67 -41055227.54 -41055227.41 0.0084 0.0021  
 Mercury -117116-02-26 00:15 J -41055139.62 -41055139.49 -41055139.36 0.0084 0.0006  
 Mercury -117116-05-25 01:27 J -41055051.57 -41055051.44 -41055051.30 0.0084 0.0009  
 Mercury -117116-08-21 02:53 J -41054963.51 -41054963.38 -41054963.25 0.0084 0.0024  
 Mercury -117116-11-17 04:05 J -41054875.45 -41054875.33 -41054875.21 0.0083 0.0038  
 Mercury -117115-02-13 05:17 J -41054787.38 -41054787.28 -41054787.17 0.0083 0.0053  
 Mercury -117115-05-12 06:29 J -41054699.30 -41054699.23 -41054699.15 0.0083 0.0068  
 Mercury -117115-08-08 07:56 J -41054611.18 -41054611.17 -41054611.16 0.0083 0.0082  
 Earth -117111-06-05 06:44 J -41053214.45 -41053214.22 -41053213.96 0.0081 0.0014  
 Moon -117111-06-05 08:10 J -41053214.41 -41053214.16 -41053213.90 0.0081 0.0010 \*  
 Venus -117108-01-20 17:17 J -41052253.95 -41052253.78 -41052253.57 0.0079 0.0036  
 Venus -117108-09-03 02:10 J -41052028.59 -41052028.41 -41052028.21 0.0079 0.0037

# 117TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 117th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-116963-06-19 22:05 J	-40999142.65	-40999142.58	-40999142.47	0.0060	0.0053		
Mercury	-116963-09-15 23:32 J	-40999054.63	-40999054.52	-40999054.38	0.0060	0.0046		
Mercury	-116963-12-13 00:58 J	-40998966.60	-40998966.46	-40998966.30	0.0060	0.0038		
Mercury	-116962-03-11 02:39 J	-40998878.56	-40998878.39	-40998878.22	0.0060	0.0030		
Mercury	-116962-06-07 03:36 J	-40998790.51	-40998790.35	-40998790.16	0.0060	0.0022		
Mercury	-116962-09-03 05:03 J	-40998702.46	-40998702.29	-40998702.09	0.0060	0.0014		
Mercury	-116962-11-30 06:29 J	-40998614.41	-40998614.23	-40998614.03	0.0060	0.0007		
Mercury	-116961-02-26 07:56 J	-40998526.36	-40998526.17	-40998525.97	0.0061	0.0002		
Mercury	-116961-05-24 09:22 J	-40998438.30	-40998438.11	-40998437.92	0.0061	0.0010		
Mercury	-116961-08-20 10:34 J	-40998350.24	-40998350.06	-40998349.87	0.0061	0.0018		
Mercury	-116961-11-16 11:46 J	-40998262.17	-40998262.01	-40998261.82	0.0061	0.0026		
Mercury	-116960-02-12 12:58 J	-40998174.10	-40998173.96	-40998173.78	0.0061	0.0034		
Mercury	-116960-05-11 14:24 J	-40998086.02	-40998085.90	-40998085.74	0.0061	0.0042		
Mercury	-116960-08-07 15:36 J	-40997997.93	-40997997.85	-40997997.72	0.0061	0.0050		
Mercury	-116960-11-03 17:03 J	-40997909.83	-40997909.79	-40997909.71	0.0061	0.0058		
Moon	-116953-12-09 05:32 J	-40995317.50	-40995317.27	-40995317.00	0.0063	0.0022		
Earth	-116953-12-09 08:10 J	-40995317.40	-40995317.16	-40995316.88	0.0063	0.0018	*	
Earth	-116952-12-10 21:51 J	-40994950.68	-40994950.59	-40994950.44	0.0064	0.0057		
Moon	-116952-12-10 22:20 J	-40994950.63	-40994950.57	-40994950.44	0.0064	0.0060	*	
Mars	-116950-12-19 02:10 J	-40994212.67	-40994212.41	-40994212.12	0.0064	0.0028		
Venus	-116948-04-26 00:00 J	-40993718.69	-40993718.50	-40993718.29	0.0065	0.0032		
Venus	-116948-12-07 05:17 J	-40993493.50	-40993493.28	-40993493.04	0.0065	0.0011		
Venus	-116947-07-20 10:05 J	-40993268.18	-40993268.08	-40993267.93	0.0065	0.0054		
Mercury	-116870-10-13 02:39 J	-40965059.41	-40965059.39	-40965059.36	0.0084	0.0083		
Mercury	-116869-01-09 03:51 J	-40964971.41	-40964971.34	-40964971.25	0.0084	0.0068		
Mercury	-116869-04-06 05:17 J	-40964883.38	-40964883.28	-40964883.17	0.0084	0.0052		

Mercury -116869-07-03 06:29 J -40964795.34 -40964795.23 -40964795.10 0.0084 0.0038  
 Mercury -116869-09-29 07:56 J -40964707.30 -40964707.17 -40964707.04 0.0084 0.0022  
 Mercury -116869-12-26 09:22 J -40964619.25 -40964619.11 -40964618.98 0.0084 0.0007  
 Mercury -116868-03-24 10:34 J -40964531.19 -40964531.06 -40964530.92 0.0084 0.0008  
 Mercury -116868-06-20 11:46 J -40964443.13 -40964443.01 -40964442.87 0.0084 0.0023  
 Mercury -116868-09-16 12:58 J -40964355.07 -40964354.96 -40964354.83 0.0083 0.0038  
 Mercury -116868-12-13 14:10 J -40964267.00 -40964266.91 -40964266.79 0.0083 0.0053  
 Mercury -116867-03-11 15:22 J -40964178.92 -40964178.86 -40964178.76 0.0083 0.0068  
 Mercury -116867-06-07 17:03 J -40964090.81 -40964090.79 -40964090.77 0.0083 0.0081  
 Earth -116863-06-07 03:51 J -40962630.57 -40962630.34 -40962630.10 0.0081 0.0026  
 Moon -116863-06-07 05:03 J -40962630.52 -40962630.29 -40962630.07 0.0081 0.0027 \*  
 Venus -116861-12-24 05:32 J -40961699.46 -40961699.27 -40961699.05 0.0079 0.0021  
 Venus -116860-08-06 14:10 J -40961474.05 -40961473.91 -40961473.73 0.0079 0.0052  
 Mercury -116715-04-19 04:48 J -40908622.35 -40908622.30 -40908622.22 0.0060 0.0056  
 Mercury -116715-07-16 06:29 J -40908534.34 -40908534.23 -40908534.12 0.0060 0.0048  
 Mercury -116715-10-12 07:12 J -40908446.31 -40908446.20 -40908446.03 0.0060 0.0042  
 Mercury -116714-01-08 08:53 J -40908358.28 -40908358.13 -40908357.96 0.0060 0.0033  
 Mercury -116714-04-06 10:19 J -40908270.23 -40908270.07 -40908269.89 0.0060 0.0025  
 Mercury -116714-07-03 11:46 J -40908182.19 -40908182.01 -40908181.82 0.0060 0.0017  
 Mercury -116714-09-29 13:12 J -40908094.14 -40908093.95 -40908093.76 0.0060 0.0010  
 Mercury -116714-12-26 14:39 J -40908006.08 -40908005.89 -40908005.70 0.0060 0.0002  
 Mercury -116713-03-23 15:51 J -40907918.02 -40907917.84 -40907917.64 0.0061 0.0006  
 Mercury -116713-06-19 17:03 J -40907829.96 -40907829.79 -40907829.59 0.0061 0.0015  
 Mercury -116713-09-15 18:43 J -40907741.90 -40907741.72 -40907741.54 0.0061 0.0022  
 Mercury -116713-12-12 19:55 J -40907653.83 -40907653.67 -40907653.50 0.0061 0.0030  
 Mercury -116712-03-10 21:07 J -40907565.75 -40907565.62 -40907565.46 0.0061 0.0038  
 Mercury -116712-06-06 22:34 J -40907477.67 -40907477.56 -40907477.43 0.0061 0.0046  
 Mercury -116712-09-02 23:46 J -40907389.58 -40907389.51 -40907389.41 0.0061 0.0054  
 Moon -116705-12-10 21:07 J -40904733.87 -40904733.62 -40904733.35 0.0063 0.0022  
 Earth -116705-12-10 21:36 J -40904733.83 -40904733.60 -40904733.33 0.0063 0.0023 \*

Earth -116704-12-12 11:17 J -40904367.15 -40904367.03 -40904366.84 0.0064 0.0053  
 Moon -116704-12-12 13:12 J -40904367.06 -40904366.95 -40904366.77 0.0064 0.0053 \*  
 Mars -116701-03-28 07:55 J -40903530.46 -40903530.17 -40903529.88 0.0064 0.0017  
 Venus -116700-03-29 08:10 J -40903164.34 -40903164.16 -40903163.93 0.0065 0.0029  
 Venus -116700-11-09 13:55 J -40902939.14 -40902938.92 -40902938.69 0.0065 0.0014  
 Venus -116699-06-22 18:43 J -40902713.80 -40902713.72 -40902713.59 0.0065 0.0058  
 Mercury -116622-11-08 11:31 J -40874451.05 -40874451.02 -40874450.95 0.0084 0.0078  
 Mercury -116621-02-04 12:58 J -40874363.04 -40874362.96 -40874362.86 0.0084 0.0062  
 Mercury -116621-05-02 14:24 J -40874275.00 -40874274.90 -40874274.78 0.0084 0.0047  
 Mercury -116621-07-29 15:36 J -40874186.96 -40874186.85 -40874186.71 0.0084 0.0032  
 Mercury -116621-10-25 17:03 J -40874098.92 -40874098.79 -40874098.65 0.0084 0.0017  
 Mercury -116620-01-21 18:29 J -40874010.87 -40874010.73 -40874010.60 0.0084 0.0002  
 Mercury -116620-04-19 19:41 J -40873922.81 -40873922.68 -40873922.54 0.0084 0.0013  
 Mercury -116620-07-16 21:07 J -40873834.75 -40873834.62 -40873834.50 0.0084 0.0028  
 Mercury -116620-10-12 22:19 J -40873746.69 -40873746.57 -40873746.45 0.0083 0.0043  
 Mercury -116619-01-08 23:17 J -40873658.61 -40873658.53 -40873658.42 0.0083 0.0058  
 Mercury -116619-04-07 00:29 J -40873570.53 -40873570.48 -40873570.40 0.0083 0.0072  
 Moon -116615-06-08 14:53 J -40872047.11 -40872046.88 -40872046.62 0.0081 0.0022  
 Earth -116615-06-08 18:29 J -40872046.97 -40872046.73 -40872046.49 0.0081 0.0018 \*  
 Venus -116613-11-26 13:55 J -40871145.12 -40871144.92 -40871144.71 0.0079 0.0022  
 Venus -116612-07-09 22:34 J -40870919.71 -40870919.56 -40870919.39 0.0079 0.0050  
 Mercury -116467-05-15 11:17 J -40818014.06 -40818014.03 -40818013.94 0.0060 0.0057  
 Mercury -116467-08-11 12:43 J -40817926.06 -40817925.97 -40817925.84 0.0060 0.0049  
 Mercury -116467-11-07 14:24 J -40817838.03 -40817837.90 -40817837.75 0.0060 0.0041  
 Mercury -116466-02-03 15:51 J -40817749.99 -40817749.84 -40817749.68 0.0060 0.0034  
 Mercury -116466-05-02 16:48 J -40817661.95 -40817661.80 -40817661.61 0.0060 0.0026  
 Mercury -116466-07-29 18:15 J -40817573.91 -40817573.74 -40817573.54 0.0060 0.0019  
 Mercury -116466-10-25 19:55 J -40817485.86 -40817485.67 -40817485.48 0.0060 0.0010  
 Mercury -116465-01-21 21:22 J -40817397.80 -40817397.61 -40817397.42 0.0060 0.0002  
 Mercury -116465-04-18 22:34 J -40817309.74 -40817309.56 -40817309.36 0.0061 0.0006



Mercury -116465-07-16 00:00 J -40817221.68 -40817221.50 -40817221.31 0.0061 0.0014

Mercury -116465-10-12 01:12 J -40817133.62 -40817133.45 -40817133.26 0.0061 0.0022

Mercury -116464-01-08 02:24 J -40817045.55 -40817045.40 -40817045.22 0.0061 0.0030

Mercury -116464-04-06 03:36 J -40816957.48 -40816957.35 -40816957.18 0.0061 0.0038

Mercury -116464-07-03 05:03 J -40816869.39 -40816869.29 -40816869.14 0.0061 0.0046

Mercury -116464-09-29 06:15 J -40816781.30 -40816781.24 -40816781.12 0.0061 0.0054

Earth -116457-12-12 06:15 J -40814150.44 -40814150.24 -40814150.00 0.0063 0.0037

Moon -116457-12-12 09:22 J -40814150.30 -40814150.11 -40814149.86 0.0063 0.0035 \*

Moon -116456-12-13 16:48 J -40813784.01 -40813783.80 -40813783.56 0.0064 0.0034

Earth -116456-12-13 20:39 J -40813783.85 -40813783.64 -40813783.41 0.0064 0.0037 \*

Mars -116453-07-06 06:00 J -40812848.45 -40812848.25 -40812848.00 0.0064 0.0044

Venus -116452-03-01 13:41 J -40812610.10 -40812609.93 -40812609.71 0.0065 0.0035

Venus -116452-10-12 19:27 J -40812384.91 -40812384.69 -40812384.45 0.0065 0.0008

Venus -116451-05-26 00:15 J -40812159.60 -40812159.49 -40812159.32 0.0065 0.0051

Mercury -116374-12-04 19:55 J -40783842.70 -40783842.67 -40783842.60 0.0084 0.0078

Mercury -116373-03-01 21:36 J -40783754.69 -40783754.60 -40783754.51 0.0084 0.0062

Mercury -116373-05-28 22:48 J -40783666.65 -40783666.55 -40783666.43 0.0084 0.0047

Mercury -116373-08-25 00:00 J -40783578.61 -40783578.50 -40783578.36 0.0084 0.0032

Mercury -116373-11-21 01:27 J -40783490.57 -40783490.44 -40783490.30 0.0084 0.0017

Mercury -116372-02-17 02:53 J -40783402.52 -40783402.38 -40783402.25 0.0084 0.0002

Mercury -116372-05-16 04:05 J -40783314.46 -40783314.33 -40783314.19 0.0084 0.0013

Mercury -116372-08-12 05:31 J -40783226.40 -40783226.27 -40783226.15 0.0084 0.0028

Mercury -116372-11-08 06:43 J -40783138.34 -40783138.22 -40783138.10 0.0083 0.0042

Mercury -116371-02-04 07:41 J -40783050.26 -40783050.18 -40783050.07 0.0083 0.0058

Mercury -116371-05-03 08:53 J -40782962.18 -40782962.13 -40782962.05 0.0083 0.0072

Earth -116367-06-10 05:17 J -40781463.53 -40781463.28 -40781463.03 0.0081 0.0002

Moon -116367-06-10 08:10 J -40781463.41 -40781463.16 -40781462.90 0.0081 0.0004 \*

Mars -116366-12-31 16:34 J -40780894.10 -40780893.81 -40780893.50 0.0080 0.0035

Venus -116365-10-29 19:55 J -40780590.85 -40780590.67 -40780590.46 0.0079 0.0033

Venus -116364-06-12 04:34 J -40780365.48 -40780365.31 -40780365.11 0.0079 0.0040

Mercury -116219-09-06 18:29 J -40727317.80 -40727317.73 -40727317.63 0.0060 0.0053

Mercury -116219-12-03 19:55 J -40727229.78 -40727229.67 -40727229.54 0.0060 0.0046

Mercury -116218-03-01 20:53 J -40727141.75 -40727141.63 -40727141.46 0.0060 0.0039

Mercury -116218-05-28 22:34 J -40727053.71 -40727053.56 -40727053.38 0.0060 0.0030

Mercury -116218-08-25 00:00 J -40726965.67 -40726965.50 -40726965.31 0.0060 0.0022

Mercury -116218-11-21 01:27 J -40726877.62 -40726877.44 -40726877.25 0.0060 0.0014

Mercury -116217-02-17 02:53 J -40726789.57 -40726789.38 -40726789.19 0.0060 0.0007

Mercury -116217-05-15 04:19 J -40726701.51 -40726701.32 -40726701.13 0.0060 0.0001

Mercury -116217-08-11 05:31 J -40726613.45 -40726613.27 -40726613.08 0.0060 0.0009

Mercury -116217-11-07 06:58 J -40726525.39 -40726525.21 -40726525.02 0.0061 0.0017

Mercury -116216-02-03 08:10 J -40726437.33 -40726437.16 -40726436.98 0.0061 0.0025

Mercury -116216-05-02 09:36 J -40726349.25 -40726349.10 -40726348.93 0.0061 0.0033

Mercury -116216-07-29 10:48 J -40726261.18 -40726261.05 -40726260.90 0.0061 0.0041

Mercury -116216-10-25 12:00 J -40726173.09 -40726173.00 -40726172.87 0.0061 0.0049

Mercury -116215-01-21 13:27 J -40726084.99 -40726084.94 -40726084.86 0.0061 0.0057

Moon -116209-12-13 07:55 J -40723567.17 -40723567.17 -40723567.11 0.0063 0.0063

Earth -116209-12-13 10:48 J -40723567.08 -40723567.05 -40723566.95 0.0063 0.0062

Earth -116208-12-15 00:58 J -40723200.71 -40723200.46 -40723200.18 0.0063 0.0013

Moon -116208-12-15 02:53 J -40723200.64 -40723200.38 -40723200.09 0.0063 0.0014 \*

Mars -116205-10-13 22:05 J -40722166.72 -40722166.58 -40722166.39 0.0064 0.0054

Venus -116204-02-01 16:48 J -40722055.92 -40722055.80 -40722055.63 0.0065 0.0050

Venus -116204-09-14 22:19 J -40721830.78 -40721830.57 -40721830.33 0.0065 0.0008

Venus -116203-04-28 03:51 J -40721605.53 -40721605.34 -40721605.15 0.0065 0.0035

Mercury -116125-03-28 04:19 J -40693146.38 -40693146.32 -40693146.25 0.0084 0.0073

Mercury -116125-06-24 05:31 J -40693058.35 -40693058.27 -40693058.16 0.0084 0.0059

Mercury -116125-09-20 06:58 J -40692970.32 -40692970.21 -40692970.09 0.0084 0.0043

Mercury -116125-12-17 08:24 J -40692882.28 -40692882.15 -40692882.02 0.0084 0.0028

Mercury -116124-03-15 09:36 J -40692794.23 -40692794.10 -40692793.96 0.0084 0.0014

Mercury -116124-06-11 11:03 J -40692706.18 -40692706.04 -40692705.91 0.0084 0.0002

Mercury -116124-09-07 12:15 J -40692618.12 -40692617.99 -40692617.86 0.0084 0.0016

Mercury -116124-12-04 13:27 J -40692530.06 -40692529.94 -40692529.81 0.0083 0.0031

Mercury -116123-03-02 14:53 J -40692441.99 -40692441.88 -40692441.77 0.0083 0.0046

Mercury -116123-05-29 15:51 J -40692353.92 -40692353.84 -40692353.74 0.0083 0.0061

Mercury -116123-08-25 17:03 J -40692265.83 -40692265.79 -40692265.72 0.0083 0.0075

Earth -116119-06-11 07:41 J -40690880.37 -40690880.18 -40690879.97 0.0081 0.0048

Moon -116119-06-11 07:55 J -40690880.35 -40690880.17 -40690879.98 0.0081 0.0050 \*

Mars -116117-04-08 14:39 J -40690213.18 -40690212.89 -40690212.55 0.0080 0.0027

Venus -116117-10-01 20:53 J -40690036.73 -40690036.63 -40690036.50 0.0080 0.0067

Venus -116116-05-15 06:15 J -40689811.45 -40689811.24 -40689811.03 0.0079 0.0006

Venus -116116-12-26 14:24 J -40689585.91 -40689585.90 -40689585.85 0.0079 0.0078

# 116TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 116th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-115971-12-30 00:15 J	-40636621.55	-40636621.49	-40636621.40	0.0060	0.0054		
Mercury	-115970-03-28 01:12 J	-40636533.54	-40636533.45	-40636533.30	0.0060	0.0047		
Mercury	-115970-06-24 02:53 J	-40636445.51	-40636445.38	-40636445.22	0.0060	0.0039		
Mercury	-115970-09-20 04:19 J	-40636357.47	-40636357.32	-40636357.14	0.0060	0.0031		
Mercury	-115970-12-17 05:46 J	-40636269.43	-40636269.26	-40636269.07	0.0060	0.0024		
Mercury	-115969-03-14 07:12 J	-40636181.38	-40636181.20	-40636181.01	0.0060	0.0016		
Mercury	-115969-06-10 08:24 J	-40636093.33	-40636093.15	-40636092.95	0.0060	0.0009		

Mercury -115969-09-06 10:05 J -40636005.27 -40636005.08 -40636004.89 0.0060 0.0001  
 Mercury -115969-12-03 11:17 J -40635917.22 -40635917.03 -40635916.83 0.0060 0.0008  
 Mercury -115968-03-01 12:43 J -40635829.15 -40635828.97 -40635828.78 0.0061 0.0016  
 Mercury -115968-05-28 13:55 J -40635741.09 -40635740.92 -40635740.73 0.0061 0.0024  
 Mercury -115968-08-24 15:07 J -40635653.02 -40635652.87 -40635652.69 0.0061 0.0032  
 Mercury -115968-11-20 16:19 J -40635564.94 -40635564.82 -40635564.65 0.0061 0.0040  
 Mercury -115967-02-16 17:46 J -40635476.86 -40635476.76 -40635476.62 0.0061 0.0048  
 Mercury -115967-05-15 18:58 J -40635388.76 -40635388.71 -40635388.61 0.0061 0.0056  
 Earth -115960-12-16 01:27 J -40632617.68 -40632617.44 -40632617.18 0.0063 0.0023  
 Moon -115960-12-16 03:36 J -40632617.58 -40632617.35 -40632617.08 0.0063 0.0022 \*  
 Moon -115959-12-17 11:17 J -40632251.15 -40632251.03 -40632250.83 0.0064 0.0052  
 Earth -115959-12-17 15:07 J -40632251.00 -40632250.87 -40632250.68 0.0064 0.0052 \*  
 Mars -115956-01-21 06:29 J -40631485.41 -40631485.23 -40631485.00 0.0064 0.0047  
 Venus -115956-08-17 22:19 J -40631276.75 -40631276.57 -40631276.35 0.0065 0.0032  
 Venus -115955-03-31 03:36 J -40631051.56 -40631051.35 -40631051.11 0.0065 0.0011  
 Venus -115955-11-11 08:53 J -40630826.25 -40630826.13 -40630825.99 0.0065 0.0054  
 Mercury -115877-07-20 11:31 J -40602450.07 -40602450.02 -40602449.95 0.0084 0.0076  
 Mercury -115877-10-16 12:58 J -40602362.05 -40602361.96 -40602361.86 0.0084 0.0061  
 Mercury -115876-01-12 14:24 J -40602274.01 -40602273.90 -40602273.79 0.0084 0.0045  
 Mercury -115876-04-10 15:36 J -40602185.97 -40602185.85 -40602185.72 0.0084 0.0031  
 Mercury -115876-07-07 16:48 J -40602097.92 -40602097.80 -40602097.66 0.0084 0.0016  
 Mercury -115876-10-03 18:15 J -40602009.87 -40602009.74 -40602009.60 0.0084 0.0001  
 Mercury -115876-12-30 19:27 J -40601921.82 -40601921.69 -40601921.55 0.0084 0.0015  
 Mercury -115875-03-28 20:53 J -40601833.76 -40601833.63 -40601833.50 0.0084 0.0029  
 Mercury -115875-06-24 22:05 J -40601745.69 -40601745.58 -40601745.46 0.0083 0.0043  
 Mercury -115875-09-20 23:03 J -40601657.62 -40601657.54 -40601657.43 0.0083 0.0059  
 Mercury -115875-12-18 00:29 J -40601569.54 -40601569.48 -40601569.41 0.0083 0.0073  
 Earth -115870-06-14 08:24 J -40599930.36 -40599930.15 -40599929.91 0.0081 0.0035  
 Moon -115870-06-14 11:46 J -40599930.22 -40599930.01 -40599929.76 0.0081 0.0031 \*  
 Mars -115869-07-16 05:17 J -40599532.55 -40599532.28 -40599531.98 0.0080 0.0042

Venus -115868-04-17 04:48 J -40599257.48 -40599257.30 -40599257.10 0.0080 0.0038

Venus -115868-11-28 13:27 J -40599032.11 -40599031.94 -40599031.73 0.0079 0.0036

Mercury -115722-04-23 04:48 J -40545925.31 -40545925.30 -40545925.25 0.0060 0.0059

Mercury -115722-07-20 06:15 J -40545837.32 -40545837.24 -40545837.13 0.0060 0.0051

Mercury -115722-10-16 07:27 J -40545749.30 -40545749.19 -40545749.04 0.0060 0.0044

Mercury -115721-01-12 08:53 J -40545661.27 -40545661.13 -40545660.96 0.0060 0.0036

Mercury -115721-04-09 10:19 J -40545573.23 -40545573.07 -40545572.89 0.0060 0.0028

Mercury -115721-07-06 11:46 J -40545485.18 -40545485.01 -40545484.82 0.0060 0.0021

Mercury -115721-10-02 13:27 J -40545397.13 -40545396.94 -40545396.76 0.0060 0.0013

Mercury -115721-12-29 14:39 J -40545309.08 -40545308.89 -40545308.70 0.0060 0.0005

Mercury -115720-03-27 16:05 J -40545221.02 -40545220.83 -40545220.64 0.0060 0.0003

Mercury -115720-06-23 17:17 J -40545132.96 -40545132.78 -40545132.59 0.0060 0.0011

Mercury -115720-09-19 18:43 J -40545044.90 -40545044.72 -40545044.53 0.0060 0.0019

Mercury -115720-12-16 19:55 J -40544956.83 -40544956.67 -40544956.49 0.0061 0.0027

Mercury -115719-03-14 21:07 J -40544868.76 -40544868.62 -40544868.45 0.0061 0.0035

Mercury -115719-06-10 22:19 J -40544780.68 -40544780.57 -40544780.41 0.0061 0.0043

Mercury -115719-09-06 23:46 J -40544692.59 -40544692.51 -40544692.38 0.0061 0.0051

Mercury -115719-12-04 00:58 J -40544604.48 -40544604.46 -40544604.38 0.0061 0.0059

Earth -115711-12-18 11:46 J -40541668.28 -40541668.01 -40541667.74 0.0063 0.0008

Moon -115711-12-18 14:10 J -40541668.18 -40541667.91 -40541667.63 0.0063 0.0011 \*

Mars -115708-04-30 09:22 J -40540804.37 -40540804.11 -40540803.81 0.0064 0.0024

Venus -115708-07-20 20:10 J -40540722.68 -40540722.66 -40540722.62 0.0064 0.0064

Venus -115707-03-03 00:58 J -40540497.65 -40540497.46 -40540497.22 0.0065 0.0023

Saturn -115707-09-01 20:10 J -40540315.34 -40540314.66 -40540313.90 0.0065 0.0020

Venus -115707-10-14 06:43 J -40540272.44 -40540272.22 -40540272.00 0.0065 0.0020

Venus -115706-05-27 11:17 J -40540047.05 -40540047.03 -40540046.94 0.0065 0.0063

Jupiter -115705-08-17 18:00 J -40539599.27 -40539598.75 -40539598.19 0.0065 0.0018

Mercury -115628-02-07 18:43 J -40511665.78 -40511665.72 -40511665.65 0.0084 0.0075

Mercury -115628-05-06 20:10 J -40511577.75 -40511577.66 -40511577.57 0.0084 0.0060

Mercury -115628-08-02 21:22 J -40511489.72 -40511489.61 -40511489.49 0.0084 0.0045

Mercury -115628-10-29 22:34 J -40511401.68 -40511401.56 -40511401.43 0.0084 0.0030  
 Mercury -115627-01-26 00:00 J -40511313.63 -40511313.50 -40511313.36 0.0084 0.0015  
 Mercury -115627-04-24 01:27 J -40511225.58 -40511225.44 -40511225.31 0.0084 0.0002  
 Mercury -115627-07-21 02:39 J -40511137.52 -40511137.39 -40511137.26 0.0084 0.0015  
 Mercury -115627-10-17 03:51 J -40511049.46 -40511049.34 -40511049.21 0.0084 0.0030  
 Mercury -115626-01-13 05:03 J -40510961.40 -40510961.29 -40510961.17 0.0083 0.0044  
 Mercury -115626-04-11 06:29 J -40510873.32 -40510873.23 -40510873.13 0.0083 0.0059  
 Mercury -115626-07-08 07:27 J -40510785.24 -40510785.19 -40510785.11 0.0083 0.0073  
 Moon -115622-06-14 21:36 J -40509347.77 -40509347.60 -40509347.39 0.0081 0.0050  
 Earth -115622-06-14 22:34 J -40509347.73 -40509347.56 -40509347.35 0.0081 0.0052 \*  
 Venus -115620-10-31 07:27 J -40508478.37 -40508478.19 -40508477.98 0.0080 0.0031  
 Venus -115619-06-13 16:05 J -40508252.99 -40508252.83 -40508252.63 0.0079 0.0042  
 Mercury -115474-11-11 10:19 J -40455141.10 -40455141.07 -40455141.00 0.0060 0.0058  
 Mercury -115473-02-07 11:46 J -40455053.10 -40455053.01 -40455052.89 0.0060 0.0050  
 Mercury -115473-05-05 13:27 J -40454965.07 -40454964.94 -40454964.80 0.0060 0.0042  
 Mercury -115473-08-01 14:24 J -40454877.04 -40454876.90 -40454876.72 0.0060 0.0035  
 Mercury -115473-10-28 15:51 J -40454789.00 -40454788.84 -40454788.65 0.0060 0.0028  
 Mercury -115472-01-24 17:31 J -40454700.95 -40454700.77 -40454700.59 0.0060 0.0019  
 Mercury -115472-04-22 18:58 J -40454612.90 -40454612.71 -40454612.52 0.0060 0.0012  
 Mercury -115472-07-19 20:10 J -40454524.85 -40454524.66 -40454524.46 0.0060 0.0004  
 Mercury -115472-10-15 21:36 J -40454436.79 -40454436.60 -40454436.41 0.0060 0.0004  
 Mercury -115471-01-11 23:03 J -40454348.73 -40454348.54 -40454348.35 0.0060 0.0012  
 Mercury -115471-04-10 00:15 J -40454260.67 -40454260.49 -40454260.30 0.0060 0.0020  
 Mercury -115471-07-07 01:27 J -40454172.60 -40454172.44 -40454172.26 0.0061 0.0028  
 Mercury -115471-10-03 02:39 J -40454084.52 -40454084.39 -40454084.21 0.0061 0.0036  
 Mercury -115471-12-30 03:51 J -40453996.45 -40453996.34 -40453996.18 0.0061 0.0044  
 Mercury -115470-03-28 05:17 J -40453908.36 -40453908.28 -40453908.15 0.0061 0.0052  
 Mercury -115470-06-24 07:12 J -40453820.24 -40453820.20 -40453820.16 0.0061 0.0059  
 Earth -115463-12-19 05:46 J -40451085.44 -40451085.26 -40451085.02 0.0063 0.0041  
 Moon -115463-12-19 06:58 J -40451085.39 -40451085.21 -40451085.00 0.0063 0.0041 \*

Moon -115462-12-20 17:31 J -40450718.97 -40450718.77 -40450718.52 0.0064 0.0036  
 Earth -115462-12-20 20:10 J -40450718.87 -40450718.66 -40450718.41 0.0064 0.0034 \*  
 Mars -115460-08-07 10:48 J -40450123.34 -40450123.05 -40450122.74 0.0064 0.0004  
 Venus -115459-02-02 22:05 J -40449943.66 -40449943.58 -40449943.46 0.0064 0.0058  
 Venus -115459-09-16 03:22 J -40449718.57 -40449718.36 -40449718.13 0.0065 0.0016  
 Venus -115458-04-29 08:10 J -40449493.35 -40449493.16 -40449492.93 0.0065 0.0027  
 Mercury -115380-08-29 01:27 J -40420881.49 -40420881.44 -40420881.36 0.0084 0.0075  
 Mercury -115380-11-25 02:53 J -40420793.47 -40420793.38 -40420793.28 0.0084 0.0059  
 Mercury -115379-02-21 04:19 J -40420705.43 -40420705.32 -40420705.20 0.0084 0.0044  
 Mercury -115379-05-20 05:46 J -40420617.39 -40420617.26 -40420617.14 0.0084 0.0029  
 Mercury -115379-08-16 06:58 J -40420529.34 -40420529.21 -40420529.08 0.0084 0.0014  
 Mercury -115379-11-12 08:10 J -40420441.29 -40420441.16 -40420441.02 0.0084 0.0003  
 Mercury -115378-02-08 09:36 J -40420353.23 -40420353.10 -40420352.97 0.0084 0.0015  
 Mercury -115378-05-07 10:48 J -40420265.17 -40420265.05 -40420264.92 0.0084 0.0030  
 Mercury -115378-08-03 12:00 J -40420177.11 -40420177.00 -40420176.88 0.0083 0.0044  
 Mercury -115378-10-30 13:27 J -40420089.04 -40420088.94 -40420088.85 0.0083 0.0059  
 Mercury -115377-01-26 14:24 J -40420000.95 -40420000.90 -40420000.83 0.0083 0.0073  
 Earth -115373-06-16 15:07 J -40418398.12 -40418397.87 -40418397.62 0.0081 0.0003  
 Moon -115373-06-16 18:00 J -40418398.00 -40418397.75 -40418397.51 0.0081 0.0000 \*  
 Venus -115371-05-16 10:05 J -40417699.27 -40417699.08 -40417698.87 0.0080 0.0025  
 Venus -115371-12-27 18:29 J -40417473.87 -40417473.73 -40417473.54 0.0079 0.0049  
 Mercury -115225-05-31 15:36 J -40364356.88 -40364356.85 -40364356.78 0.0060 0.0058  
 Mercury -115225-08-27 17:17 J -40364268.88 -40364268.78 -40364268.67 0.0060 0.0050  
 Mercury -115225-11-23 18:15 J -40364180.85 -40364180.74 -40364180.58 0.0060 0.0043  
 Mercury -115224-02-19 19:41 J -40364092.82 -40364092.68 -40364092.50 0.0060 0.0035  
 Mercury -115224-05-18 21:22 J -40364004.78 -40364004.61 -40364004.43 0.0060 0.0027  
 Mercury -115224-08-14 22:48 J -40363916.73 -40363916.55 -40363916.37 0.0060 0.0020  
 Mercury -115224-11-11 00:00 J -40363828.68 -40363828.50 -40363828.30 0.0060 0.0012  
 Mercury -115223-02-07 01:27 J -40363740.63 -40363740.44 -40363740.24 0.0060 0.0004  
 Mercury -115223-05-06 02:53 J -40363652.57 -40363652.38 -40363652.19 0.0060 0.0004

Mercury -115223-08-02 04:05 J -40363564.51 -40363564.33 -40363564.13 0.0060 0.0012

Mercury -115223-10-29 05:17 J -40363476.45 -40363476.28 -40363476.08 0.0060 0.0020

Mercury -115222-01-25 06:43 J -40363388.38 -40363388.22 -40363388.04 0.0061 0.0027

Mercury -115222-04-23 07:55 J -40363300.31 -40363300.17 -40363300.00 0.0061 0.0036

Mercury -115222-07-20 09:36 J -40363212.23 -40363212.10 -40363211.96 0.0061 0.0043

Mercury -115222-10-16 10:48 J -40363124.14 -40363124.05 -40363123.93 0.0061 0.0051

Mercury -115221-01-12 12:15 J -40363036.02 -40363035.99 -40363035.93 0.0061 0.0059

Earth -115214-12-21 13:55 J -40360136.18 -40360135.92 -40360135.66 0.0063 0.0017

Moon -115214-12-21 17:46 J -40360136.03 -40360135.76 -40360135.50 0.0063 0.0015 \*

Moon -115213-12-22 00:43 J -40359769.55 -40359769.47 -40359769.32 0.0064 0.0057

Earth -115213-12-22 02:53 J -40359769.46 -40359769.38 -40359769.22 0.0064 0.0058 \*

Mars -115212-11-14 09:36 J -40359442.31 -40359442.10 -40359441.82 0.0064 0.0037

Venus -115211-08-18 23:31 J -40359164.64 -40359164.52 -40359164.39 0.0064 0.0054

Venus -115210-04-01 04:19 J -40358939.53 -40358939.32 -40358939.08 0.0064 0.0013

Venus -115210-11-12 09:22 J -40358714.30 -40358714.11 -40358713.89 0.0065 0.0030

Mercury -115131-03-19 07:41 J -40330097.21 -40330097.18 -40330097.12 0.0084 0.0080

Mercury -115131-06-15 09:07 J -40330009.19 -40330009.12 -40330009.02 0.0084 0.0064

Mercury -115131-09-11 10:34 J -40329921.16 -40329921.06 -40329920.95 0.0084 0.0049

Mercury -115131-12-08 12:00 J -40329833.12 -40329833.00 -40329832.88 0.0084 0.0034

Mercury -115130-03-06 13:12 J -40329745.08 -40329744.95 -40329744.81 0.0084 0.0020

Mercury -115130-06-02 14:38 J -40329657.03 -40329656.89 -40329656.76 0.0084 0.0005

Mercury -115130-08-29 15:50 J -40329568.97 -40329568.84 -40329568.70 0.0084 0.0010

Mercury -115130-11-25 17:02 J -40329480.91 -40329480.79 -40329480.66 0.0084 0.0025

Mercury -115129-02-21 18:14 J -40329392.85 -40329392.74 -40329392.61 0.0083 0.0040

Mercury -115129-05-19 19:41 J -40329304.78 -40329304.68 -40329304.58 0.0083 0.0054

Mercury -115129-08-15 20:53 J -40329216.70 -40329216.63 -40329216.55 0.0083 0.0068

Mercury -115129-11-11 22:19 J -40329128.58 -40329128.57 -40329128.56 0.0083 0.0082

Earth -115124-06-19 03:07 J -40327448.55 -40327448.37 -40327448.14 0.0081 0.0045

Moon -115124-06-19 04:48 J -40327448.51 -40327448.30 -40327448.07 0.0081 0.0040 \*

Venus -115123-11-29 10:19 J -40326920.25 -40326920.07 -40326919.85 0.0080 0.0030



Venus -115122-07-12 19:26 J -40326694.86 -40326694.69 -40326694.51 0.0079 0.0044

# 115TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 115th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-114977-12-19 21:07 J	-40273572.65	-40273572.62	-40273572.53	0.0060	0.0057		
Mercury	-114976-03-17 22:34 J	-40273484.65	-40273484.56	-40273484.43	0.0060	0.0049		
Mercury	-114976-06-14 00:14 J	-40273396.62	-40273396.49	-40273396.34	0.0060	0.0041		
Mercury	-114976-09-10 01:12 J	-40273308.58	-40273308.45	-40273308.27	0.0060	0.0034		
Mercury	-114976-12-07 02:53 J	-40273220.54	-40273220.38	-40273220.19	0.0060	0.0026		
Mercury	-114975-03-05 04:19 J	-40273132.50	-40273132.32	-40273132.13	0.0060	0.0018		
Mercury	-114975-06-01 05:46 J	-40273044.45	-40273044.26	-40273044.07	0.0060	0.0011		
Mercury	-114975-08-28 07:12 J	-40272956.39	-40272956.20	-40272956.01	0.0060	0.0003		
Mercury	-114975-11-24 08:24 J	-40272868.33	-40272868.15	-40272867.95	0.0060	0.0006		
Mercury	-114974-02-20 09:50 J	-40272780.27	-40272780.09	-40272779.90	0.0060	0.0013		
Mercury	-114974-05-19 11:02 J	-40272692.21	-40272692.04	-40272691.85	0.0060	0.0021		
Mercury	-114974-08-15 12:29 J	-40272604.14	-40272603.98	-40272603.80	0.0061	0.0029		
Mercury	-114974-11-11 13:41 J	-40272516.07	-40272515.93	-40272515.76	0.0061	0.0037		
Mercury	-114973-02-07 14:53 J	-40272427.99	-40272427.88	-40272427.73	0.0061	0.0045		
Mercury	-114973-05-05 16:48 J	-40272339.89	-40272339.80	-40272339.70	0.0061	0.0052		
Mercury	-114973-08-01 18:00 J	-40272251.76	-40272251.75	-40272251.72	0.0061	0.0060		

Earth -114966-12-22 08:53 J -40269553.13 -40269553.13 -40269553.07 0.0063 0.0063  
 Moon -114965-12-22 21:50 J -40269186.85 -40269186.59 -40269186.30 0.0063 0.0014  
 Earth -114965-12-22 23:02 J -40269186.79 -40269186.54 -40269186.26 0.0063 0.0011 \*  
 Mars -114963-02-21 11:31 J -40268761.06 -40268761.02 -40268760.93 0.0064 0.0062  
 Venus -114962-03-04 01:26 J -40268385.57 -40268385.44 -40268385.25 0.0064 0.0047  
 Venus -114962-10-15 07:12 J -40268160.42 -40268160.20 -40268159.97 0.0065 0.0005  
 Venus -114961-05-27 12:00 J -40267935.17 -40267935.00 -40267934.80 0.0065 0.0038  
 Mercury -114883-10-07 15:22 J -40239312.91 -40239312.86 -40239312.81 0.0084 0.0077  
 Mercury -114882-01-03 16:34 J -40239224.89 -40239224.81 -40239224.72 0.0084 0.0062  
 Mercury -114882-04-01 17:46 J -40239136.86 -40239136.76 -40239136.64 0.0084 0.0047  
 Mercury -114882-06-28 19:12 J -40239048.82 -40239048.70 -40239048.57 0.0084 0.0032  
 Mercury -114882-09-24 20:38 J -40238960.77 -40238960.64 -40238960.51 0.0084 0.0017  
 Mercury -114882-12-21 21:50 J -40238872.72 -40238872.59 -40238872.45 0.0084 0.0002  
 Mercury -114881-03-18 23:02 J -40238784.67 -40238784.54 -40238784.40 0.0084 0.0013  
 Mercury -114881-06-15 00:29 J -40238696.61 -40238696.48 -40238696.35 0.0084 0.0027  
 Mercury -114881-09-11 01:41 J -40238608.54 -40238608.43 -40238608.31 0.0083 0.0041  
 Mercury -114881-12-08 02:38 J -40238520.47 -40238520.39 -40238520.28 0.0083 0.0056  
 Mercury -114880-03-06 04:05 J -40238432.39 -40238432.33 -40238432.25 0.0083 0.0070  
 Earth -114876-06-19 18:29 J -40236865.93 -40236865.73 -40236865.49 0.0081 0.0039  
 Moon -114876-06-19 21:07 J -40236865.83 -40236865.62 -40236865.40 0.0081 0.0037 \*  
 Venus -114874-06-14 13:55 J -40236141.12 -40236140.92 -40236140.71 0.0080 0.0020  
 Venus -114873-01-25 22:19 J -40235915.71 -40235915.57 -40235915.39 0.0079 0.0053  
 Mercury -114728-07-10 02:38 J -40182788.43 -40182788.39 -40182788.29 0.0060 0.0056  
 Mercury -114728-10-06 04:19 J -40182700.41 -40182700.32 -40182700.18 0.0060 0.0048  
 Mercury -114727-01-02 06:00 J -40182612.39 -40182612.25 -40182612.10 0.0060 0.0040  
 Mercury -114727-03-31 06:58 J -40182524.35 -40182524.21 -40182524.03 0.0060 0.0033  
 Mercury -114727-06-27 08:24 J -40182436.31 -40182436.15 -40182435.96 0.0060 0.0026  
 Mercury -114727-09-23 10:05 J -40182348.26 -40182348.08 -40182347.89 0.0060 0.0017  
 Mercury -114727-12-20 11:31 J -40182260.21 -40182260.02 -40182259.83 0.0060 0.0010  
 Mercury -114726-03-18 12:58 J -40182172.15 -40182171.96 -40182171.77 0.0060 0.0002

Mercury -114726-06-14 14:10 J -40182084.10 -40182083.91 -40182083.71 0.0060 0.0006

Mercury -114726-09-10 15:36 J -40181996.03 -40181995.85 -40181995.66 0.0060 0.0014

Mercury -114726-12-07 16:48 J -40181907.97 -40181907.80 -40181907.61 0.0060 0.0022

Mercury -114725-03-04 18:00 J -40181819.90 -40181819.75 -40181819.56 0.0061 0.0030

Mercury -114725-05-31 19:12 J -40181731.83 -40181731.70 -40181731.52 0.0061 0.0038

Mercury -114725-08-27 20:38 J -40181643.74 -40181643.64 -40181643.49 0.0061 0.0046

Mercury -114725-11-23 22:34 J -40181555.65 -40181555.56 -40181555.47 0.0061 0.0053

Earth -114717-12-23 17:31 J -40178603.95 -40178603.77 -40178603.52 0.0063 0.0038

Moon -114717-12-23 21:07 J -40178603.81 -40178603.62 -40178603.38 0.0063 0.0038 \*

Moon -114716-12-25 04:48 J -40178237.52 -40178237.30 -40178237.09 0.0064 0.0038

Earth -114716-12-25 07:55 J -40178237.37 -40178237.17 -40178236.92 0.0064 0.0037 \*

Venus -114714-09-17 03:50 J -40177606.49 -40177606.34 -40177606.13 0.0064 0.0040

Venus -114713-04-29 09:22 J -40177381.34 -40177381.11 -40177380.88 0.0065 0.0003

Venus -114713-12-10 13:55 J -40177156.06 -40177155.92 -40177155.73 0.0065 0.0045

Mercury -114634-04-27 22:19 J -40148528.62 -40148528.57 -40148528.52 0.0084 0.0077

Mercury -114634-07-24 23:46 J -40148440.60 -40148440.51 -40148440.42 0.0084 0.0062

Mercury -114634-10-21 00:43 J -40148352.57 -40148352.47 -40148352.35 0.0084 0.0047

Mercury -114633-01-17 02:10 J -40148264.53 -40148264.41 -40148264.28 0.0084 0.0032

Mercury -114633-04-14 03:36 J -40148176.48 -40148176.35 -40148176.22 0.0084 0.0017

Mercury -114633-07-11 04:48 J -40148088.43 -40148088.30 -40148088.16 0.0084 0.0003

Mercury -114633-10-07 06:00 J -40148000.38 -40148000.25 -40148000.11 0.0084 0.0012

Mercury -114632-01-03 07:26 J -40147912.32 -40147912.19 -40147912.06 0.0084 0.0027

Mercury -114632-04-01 08:24 J -40147824.25 -40147824.15 -40147824.02 0.0083 0.0042

Mercury -114632-06-28 09:50 J -40147736.18 -40147736.09 -40147735.99 0.0083 0.0056

Mercury -114632-09-24 10:48 J -40147648.10 -40147648.05 -40147647.96 0.0083 0.0071

Earth -114627-06-22 11:02 J -40145916.28 -40145916.04 -40145915.79 0.0081 0.0013

Moon -114627-06-22 14:10 J -40145916.15 -40145915.91 -40145915.65 0.0081 0.0010 \*

Venus -114626-12-28 16:34 J -40145362.02 -40145361.81 -40145361.60 0.0080 0.0015

Venus -114625-08-10 01:26 J -40145136.59 -40145136.44 -40145136.30 0.0079 0.0058

Mercury -114479-01-28 09:36 J -40092004.19 -40092004.10 -40092004.01 0.0060 0.0052

Mercury -114479-04-26 10:34 J -40091916.17 -40091916.06 -40091915.91 0.0060 0.0045

Mercury -114479-07-23 12:00 J -40091828.14 -40091828.00 -40091827.83 0.0060 0.0037

Mercury -114479-10-19 13:41 J -40091740.10 -40091739.93 -40091739.76 0.0060 0.0029

Mercury -114478-01-15 14:38 J -40091652.05 -40091651.89 -40091651.69 0.0060 0.0022

Mercury -114478-04-13 16:19 J -40091564.00 -40091563.82 -40091563.63 0.0060 0.0014

Mercury -114478-07-10 17:46 J -40091475.95 -40091475.76 -40091475.57 0.0060 0.0006

Mercury -114478-10-06 19:12 J -40091387.89 -40091387.70 -40091387.51 0.0060 0.0001

Mercury -114477-01-02 20:24 J -40091299.84 -40091299.65 -40091299.45 0.0060 0.0009

Mercury -114477-03-30 21:50 J -40091211.77 -40091211.59 -40091211.40 0.0060 0.0017

Mercury -114477-06-26 23:02 J -40091123.71 -40091123.54 -40091123.35 0.0061 0.0025

Mercury -114477-09-23 00:14 J -40091035.63 -40091035.49 -40091035.31 0.0061 0.0033

Mercury -114477-12-20 01:41 J -40090947.56 -40090947.43 -40090947.27 0.0061 0.0041

Mercury -114476-03-18 02:53 J -40090859.47 -40090859.38 -40090859.24 0.0061 0.0049

Mercury -114476-06-14 04:05 J -40090771.37 -40090771.33 -40090771.23 0.0061 0.0057

Earth -114468-12-26 06:00 J -40087654.52 -40087654.25 -40087653.98 0.0064 0.0006

Moon -114468-12-26 06:43 J -40087654.49 -40087654.22 -40087653.93 0.0064 0.0004 \*

Venus -114465-04-01 07:55 J -40086827.36 -40086827.17 -40086826.94 0.0064 0.0028

Venus -114465-11-12 13:26 J -40086602.16 -40086601.94 -40086601.71 0.0065 0.0015

Venus -114464-06-25 18:29 J -40086376.83 -40086376.73 -40086376.62 0.0065 0.0057

Mercury -114386-08-20 05:02 J -40057832.30 -40057832.29 -40057832.27 0.0084 0.0084

Mercury -114386-11-16 06:00 J -40057744.31 -40057744.25 -40057744.16 0.0084 0.0070

Mercury -114385-02-12 07:26 J -40057656.28 -40057656.19 -40057656.08 0.0084 0.0055

Mercury -114385-05-10 08:53 J -40057568.24 -40057568.13 -40057568.01 0.0084 0.0039

Mercury -114385-08-06 10:19 J -40057480.20 -40057480.07 -40057479.94 0.0084 0.0024

Mercury -114385-11-02 11:31 J -40057392.15 -40057392.02 -40057391.88 0.0084 0.0010

Mercury -114384-01-29 12:43 J -40057304.10 -40057303.97 -40057303.83 0.0084 0.0006

Mercury -114384-04-27 14:10 J -40057216.04 -40057215.91 -40057215.78 0.0084 0.0019

Mercury -114384-07-24 15:22 J -40057127.98 -40057127.86 -40057127.73 0.0083 0.0034

Mercury -114384-10-20 16:34 J -40057039.91 -40057039.81 -40057039.70 0.0083 0.0048

Mercury -114383-01-16 18:00 J -40056951.84 -40056951.75 -40056951.66 0.0083 0.0063

Mercury -114383-04-14 18:58 J -40056863.75 -40056863.71 -40056863.65 0.0083 0.0077

Earth -114379-06-23 06:00 J -40055333.40 -40055333.25 -40055333.05 0.0081 0.0058

Moon -114379-06-23 06:43 J -40055333.38 -40055333.22 -40055333.02 0.0081 0.0054 \*

Moon -114378-06-25 05:02 J -40054966.32 -40054966.29 -40054966.18 0.0080 0.0078

Venus -114378-11-30 13:12 J -40054808.05 -40054807.95 -40054807.84 0.0080 0.0069

Mars -114377-01-18 21:07 J -40054758.82 -40054758.62 -40054758.41 0.0080 0.0063

Venus -114377-07-12 22:05 J -40054582.79 -40054582.58 -40054582.36 0.0080 0.0005

Venus -114376-02-23 06:29 J -40054357.25 -40054357.23 -40054357.17 0.0079 0.0078

Mercury -114231-05-22 13:41 J -40001307.95 -40001307.93 -40001307.85 0.0060 0.0058

Mercury -114231-08-18 15:22 J -40001219.95 -40001219.86 -40001219.74 0.0060 0.0050

Mercury -114231-11-14 17:02 J -40001131.93 -40001131.79 -40001131.66 0.0060 0.0042

Mercury -114230-02-10 18:00 J -40001043.89 -40001043.75 -40001043.58 0.0060 0.0035

Mercury -114230-05-09 19:26 J -40000955.85 -40000955.69 -40000955.51 0.0060 0.0027

Mercury -114230-08-05 21:07 J -40000867.80 -40000867.62 -40000867.44 0.0060 0.0020

Mercury -114230-11-01 22:19 J -40000779.75 -40000779.57 -40000779.37 0.0060 0.0012

Mercury -114229-01-28 23:46 J -40000691.70 -40000691.51 -40000691.31 0.0060 0.0004

Mercury -114229-04-26 01:12 J -40000603.64 -40000603.45 -40000603.26 0.0060 0.0004

Mercury -114229-07-23 02:24 J -40000515.58 -40000515.40 -40000515.20 0.0060 0.0012

Mercury -114229-10-19 03:36 J -40000427.52 -40000427.35 -40000427.15 0.0060 0.0020

Mercury -114228-01-15 05:17 J -40000339.45 -40000339.28 -40000339.10 0.0061 0.0027

Mercury -114228-04-13 06:29 J -40000251.38 -40000251.23 -40000251.06 0.0061 0.0035

Mercury -114228-07-10 07:41 J -40000163.30 -40000163.18 -40000163.03 0.0061 0.0043

Mercury -114228-10-06 09:07 J -40000075.21 -40000075.12 -40000075.00 0.0061 0.0051

Mercury -114227-01-02 10:19 J -39999987.09 -39999987.07 -39999987.00 0.0061 0.0059

Earth -114220-12-27 01:41 J -39997071.57 -39997071.43 -39997071.24 0.0063 0.0051

Moon -114220-12-27 05:46 J -39997071.39 -39997071.26 -39997071.11 0.0063 0.0054 \*

Moon -114219-12-28 12:58 J -39996705.20 -39996704.96 -39996704.71 0.0064 0.0026

Earth -114219-12-28 16:34 J -39996705.06 -39996704.81 -39996704.56 0.0064 0.0023 \*

Venus -114217-03-04 06:29 J -39996273.32 -39996273.23 -39996273.14 0.0064 0.0059

Venus -114217-10-15 11:17 J -39996048.24 -39996048.03 -39996047.80 0.0064 0.0018

Venus	-114216-05-28 16:05 J	-39995823.02	-39995822.83	-39995822.60	0.0065	0.0025
Mercury	-114137-03-09 12:14 J	-39967048.01	-39967047.99	-39967047.94	0.0084	0.0081
Mercury	-114137-06-05 13:41 J	-39966960.00	-39966959.93	-39966959.84	0.0084	0.0066
Mercury	-114137-09-01 15:07 J	-39966871.97	-39966871.87	-39966871.76	0.0084	0.0051
Mercury	-114137-11-28 16:19 J	-39966783.94	-39966783.82	-39966783.69	0.0084	0.0036
Mercury	-114136-02-24 17:46 J	-39966695.89	-39966695.76	-39966695.63	0.0084	0.0021
Mercury	-114136-05-23 18:58 J	-39966607.84	-39966607.71	-39966607.57	0.0084	0.0007
Mercury	-114136-08-19 20:10 J	-39966519.79	-39966519.66	-39966519.52	0.0084	0.0009
Mercury	-114136-11-15 21:36 J	-39966431.73	-39966431.60	-39966431.47	0.0084	0.0023
Mercury	-114135-02-11 22:34 J	-39966343.67	-39966343.56	-39966343.43	0.0083	0.0038
Mercury	-114135-05-11 00:00 J	-39966255.60	-39966255.50	-39966255.39	0.0083	0.0051
Mercury	-114135-08-07 01:26 J	-39966167.52	-39966167.44	-39966167.36	0.0083	0.0066
Mercury	-114135-11-03 02:24 J	-39966079.42	-39966079.40	-39966079.36	0.0083	0.0080
Earth	-114130-06-26 00:58 J	-39964383.70	-39964383.46	-39964383.21	0.0080	0.0002
Moon	-114130-06-26 04:19 J	-39964383.57	-39964383.32	-39964383.07	0.0080	0.0001 *
Mars	-114129-04-25 20:38 J	-39964078.97	-39964078.64	-39964078.30	0.0080	0.0005
Venus	-114129-06-14 16:48 J	-39964028.92	-39964028.80	-39964028.63	0.0080	0.0058
Venus	-114128-01-26 01:55 J	-39963803.62	-39963803.42	-39963803.20	0.0080	0.0017

# 114TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 114th millennium BCE.**

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Mercury -113983-12-10 20:10 J -39910523.72 -39910523.66 -39910523.55 0.0060 0.0054

Mercury -113982-03-08 21:50 J -39910435.70 -39910435.59 -39910435.46 0.0060 0.0046

Mercury -113982-06-04 23:31 J -39910347.67 -39910347.52 -39910347.37 0.0060 0.0038

Mercury -113982-09-01 00:29 J -39910259.63 -39910259.48 -39910259.30 0.0060 0.0031

Mercury -113982-11-28 01:55 J -39910171.59 -39910171.42 -39910171.23 0.0060 0.0024

Mercury -113981-02-24 03:36 J -39910083.54 -39910083.35 -39910083.16 0.0060 0.0016

Mercury -113981-05-22 04:48 J -39909995.49 -39909995.30 -39909995.10 0.0060 0.0008

Mercury -113981-08-18 06:14 J -39909907.43 -39909907.24 -39909907.04 0.0060 0.0001

Mercury -113981-11-14 07:41 J -39909819.37 -39909819.18 -39909818.99 0.0060 0.0008

Mercury -113980-02-10 08:53 J -39909731.31 -39909731.13 -39909730.94 0.0060 0.0016

Mercury -113980-05-09 10:05 J -39909643.24 -39909643.08 -39909642.89 0.0061 0.0024

Mercury -113980-08-05 11:46 J -39909555.17 -39909555.01 -39909554.84 0.0061 0.0031

Mercury -113980-11-01 12:58 J -39909467.10 -39909466.96 -39909466.80 0.0061 0.0039

Mercury -113979-01-28 14:10 J -39909379.01 -39909378.91 -39909378.77 0.0061 0.0047

Mercury -113979-04-26 15:36 J -39909290.91 -39909290.85 -39909290.75 0.0061 0.0055

Earth -113971-12-29 14:24 J -39906122.14 -39906121.90 -39906121.62 0.0064 0.0018

Moon -113971-12-29 16:05 J -39906122.07 -39906121.83 -39906121.56 0.0064 0.0014 \*

Moon -113970-12-31 01:12 J -39905755.56 -39905755.45 -39905755.27 0.0064 0.0054

Earth -113970-12-31 05:02 J -39905755.39 -39905755.29 -39905755.16 0.0064 0.0057 \*

Venus -113969-09-17 11:02 J -39905494.20 -39905494.04 -39905493.87 0.0064 0.0045

Venus -113968-04-30 16:05 J -39905269.06 -39905268.83 -39905268.60 0.0064 0.0003

Venus -113968-12-11 20:38 J -39905043.81 -39905043.64 -39905043.44 0.0065 0.0039

Mercury -113889-09-27 20:38 J -39876263.70 -39876263.64 -39876263.56 0.0084 0.0071

Mercury -113889-12-24 22:05 J -39876175.67 -39876175.58 -39876175.48 0.0084 0.0056

Mercury -113888-03-22 23:31 J -39876087.64 -39876087.52 -39876087.40 0.0084 0.0041

Mercury -113888-06-19 00:43 J -39875999.59 -39875999.47 -39875999.34 0.0084 0.0027

Mercury -113888-09-15 02:10 J -39875911.55 -39875911.41 -39875911.28 0.0084 0.0012

Mercury -113888-12-12 03:22 J -39875823.49 -39875823.36 -39875823.23 0.0084 0.0003

Mercury -113887-03-10 04:34 J -39875735.44 -39875735.31 -39875735.18 0.0084 0.0017

Mercury -113887-06-06 05:46 J -39875647.38 -39875647.26 -39875647.13 0.0083 0.0032  
 Mercury -113887-09-02 07:12 J -39875559.31 -39875559.20 -39875559.09 0.0083 0.0046  
 Mercury -113887-11-29 08:10 J -39875471.24 -39875471.16 -39875471.06 0.0083 0.0060  
 Mercury -113886-02-25 09:36 J -39875383.15 -39875383.10 -39875383.04 0.0083 0.0074  
 Earth -113882-06-26 21:36 J -39873800.73 -39873800.60 -39873800.44 0.0081 0.0065  
 Moon -113882-06-26 22:34 J -39873800.69 -39873800.56 -39873800.42 0.0081 0.0068 \*  
 Earth -113881-06-27 23:02 J -39873433.62 -39873433.54 -39873433.41 0.0080 0.0073  
 Moon -113881-06-28 00:14 J -39873433.54 -39873433.49 -39873433.39 0.0080 0.0076 \*  
 Mars -113881-08-02 04:48 J -39873398.60 -39873398.30 -39873397.96 0.0080 0.0027  
 Venus -113881-12-28 23:46 J -39873249.70 -39873249.51 -39873249.32 0.0080 0.0034  
 Venus -113880-08-11 08:10 J -39873024.32 -39873024.16 -39873023.96 0.0080 0.0040  
 Mercury -113734-04-04 00:43 J -39819827.48 -39819827.47 -39819827.41 0.0060 0.0059  
 Mercury -113734-07-01 02:24 J -39819739.48 -39819739.40 -39819739.29 0.0060 0.0051  
 Mercury -113734-09-27 03:36 J -39819651.46 -39819651.35 -39819651.20 0.0060 0.0044  
 Mercury -113734-12-24 05:02 J -39819563.43 -39819563.29 -39819563.12 0.0060 0.0036  
 Mercury -113733-03-21 06:43 J -39819475.38 -39819475.22 -39819475.04 0.0060 0.0028  
 Mercury -113733-06-17 07:55 J -39819387.34 -39819387.17 -39819386.97 0.0060 0.0021  
 Mercury -113733-09-13 09:22 J -39819299.29 -39819299.11 -39819298.91 0.0060 0.0014  
 Mercury -113733-12-10 11:02 J -39819211.23 -39819211.04 -39819210.85 0.0060 0.0005  
 Mercury -113732-03-08 12:29 J -39819123.18 -39819122.98 -39819122.79 0.0060 0.0003  
 Mercury -113732-06-04 13:26 J -39819035.12 -39819034.94 -39819034.74 0.0060 0.0011  
 Mercury -113732-08-31 15:07 J -39818947.05 -39818946.87 -39818946.68 0.0060 0.0018  
 Mercury -113732-11-27 16:19 J -39818858.99 -39818858.82 -39818858.64 0.0061 0.0026  
 Mercury -113731-02-23 17:31 J -39818770.91 -39818770.77 -39818770.59 0.0061 0.0034  
 Mercury -113731-05-22 18:43 J -39818682.83 -39818682.72 -39818682.55 0.0061 0.0042  
 Mercury -113731-08-18 20:38 J -39818594.75 -39818594.64 -39818594.52 0.0061 0.0049  
 Mercury -113731-11-14 21:50 J -39818506.64 -39818506.59 -39818506.51 0.0061 0.0057  
 Earth -113723-12-30 10:05 J -39815539.09 -39815539.08 -39815538.98 0.0063 0.0063  
 Moon -113723-12-30 13:26 J -39815539.01 -39815538.94 -39815538.82 0.0063 0.0060 \*  
 Moon -113722-12-31 23:46 J -39815172.77 -39815172.51 -39815172.25 0.0064 0.0009



Earth -113721-01-01 01:12 J -39815172.70 -39815172.45 -39815172.17 0.0064 0.0012 \*  
 Venus -113720-04-02 13:41 J -39814715.10 -39814714.93 -39814714.71 0.0064 0.0036  
 Mars -113720-05-23 05:17 J -39814664.36 -39814664.28 -39814664.13 0.0064 0.0060  
 Venus -113720-11-13 19:12 J -39814489.93 -39814489.70 -39814489.47 0.0064 0.0007  
 Venus -113719-06-26 23:46 J -39814264.64 -39814264.51 -39814264.34 0.0065 0.0049  
 Mercury -113640-01-20 03:07 J -39785567.40 -39785567.37 -39785567.34 0.0084 0.0082  
 Mercury -113640-04-18 04:05 J -39785479.39 -39785479.33 -39785479.24 0.0084 0.0068  
 Mercury -113640-07-15 05:31 J -39785391.37 -39785391.27 -39785391.16 0.0084 0.0053  
 Mercury -113640-10-11 06:58 J -39785303.33 -39785303.21 -39785303.09 0.0084 0.0038  
 Mercury -113639-01-07 08:10 J -39785215.28 -39785215.16 -39785215.03 0.0084 0.0023  
 Mercury -113639-04-05 09:36 J -39785127.24 -39785127.10 -39785126.97 0.0084 0.0008  
 Mercury -113639-07-02 10:48 J -39785039.18 -39785039.05 -39785038.91 0.0084 0.0006  
 Mercury -113639-09-28 12:00 J -39784951.13 -39784951.00 -39784950.87 0.0084 0.0021  
 Mercury -113639-12-25 13:12 J -39784863.06 -39784862.95 -39784862.82 0.0083 0.0035  
 Mercury -113638-03-23 14:24 J -39784775.00 -39784774.90 -39784774.78 0.0083 0.0050  
 Mercury -113638-06-19 15:50 J -39784686.92 -39784686.84 -39784686.75 0.0083 0.0064  
 Mercury -113638-09-15 16:48 J -39784598.83 -39784598.80 -39784598.74 0.0083 0.0078  
 Earth -113633-06-28 16:34 J -39782851.05 -39782850.81 -39782850.56 0.0080 0.0005  
 Moon -113633-06-28 19:55 J -39782850.92 -39782850.67 -39782850.41 0.0080 0.0002 \*  
 Venus -113632-07-14 03:50 J -39782470.54 -39782470.34 -39782470.13 0.0080 0.0021  
 Venus -113631-02-24 12:14 J -39782245.13 -39782244.99 -39782244.81 0.0079 0.0053  
 Mercury -113486-10-23 07:26 J -39729043.25 -39729043.19 -39729043.10 0.0060 0.0055  
 Mercury -113485-01-19 08:53 J -39728955.23 -39728955.13 -39728955.00 0.0060 0.0047  
 Mercury -113485-04-16 10:05 J -39728867.20 -39728867.08 -39728866.91 0.0060 0.0040  
 Mercury -113485-07-13 11:46 J -39728779.16 -39728779.01 -39728778.84 0.0060 0.0032  
 Mercury -113485-10-09 13:12 J -39728691.12 -39728690.95 -39728690.76 0.0060 0.0025  
 Mercury -113484-01-05 14:24 J -39728603.07 -39728602.90 -39728602.70 0.0060 0.0017  
 Mercury -113484-04-03 16:05 J -39728515.02 -39728514.83 -39728514.64 0.0060 0.0009  
 Mercury -113484-06-30 17:31 J -39728426.96 -39728426.77 -39728426.58 0.0060 0.0001  
 Mercury -113484-09-26 18:43 J -39728338.90 -39728338.72 -39728338.52 0.0060 0.0007

Mercury -113484-12-23 20:10 J -39728250.84 -39728250.66 -39728250.47 0.0060 0.0014

Mercury -113483-03-21 21:36 J -39728162.78 -39728162.60 -39728162.42 0.0061 0.0022

Mercury -113483-06-17 22:48 J -39728074.71 -39728074.55 -39728074.37 0.0061 0.0030

Mercury -113483-09-14 00:00 J -39727986.63 -39727986.50 -39727986.33 0.0061 0.0038

Mercury -113483-12-11 01:26 J -39727898.55 -39727898.44 -39727898.29 0.0061 0.0046

Mercury -113482-03-09 02:38 J -39727810.45 -39727810.39 -39727810.27 0.0061 0.0054

Earth -113473-01-01 23:17 J -39724589.75 -39724589.53 -39724589.27 0.0064 0.0029

Moon -113473-01-02 00:58 J -39724589.69 -39724589.46 -39724589.21 0.0064 0.0032 \*

Earth -113472-01-02 14:10 J -39724223.09 -39724222.91 -39724222.71 0.0064 0.0045

Moon -113472-01-02 14:24 J -39724223.04 -39724222.90 -39724222.70 0.0064 0.0048 \*

Venus -113472-03-05 12:58 J -39724160.99 -39724160.96 -39724160.87 0.0064 0.0062

Mars -113472-08-30 13:26 J -39723983.12 -39723982.94 -39723982.68 0.0064 0.0045

Venus -113472-10-16 18:43 J -39723935.93 -39723935.72 -39723935.50 0.0064 0.0021

Venus -113471-05-29 23:46 J -39723710.73 -39723710.51 -39723710.29 0.0064 0.0021

Venus -113470-01-10 04:34 J -39723485.35 -39723485.31 -39723485.25 0.0065 0.0063

Mercury -113392-08-10 11:17 J -39694783.09 -39694783.03 -39694782.96 0.0084 0.0073

Mercury -113392-11-06 12:43 J -39694695.06 -39694694.97 -39694694.87 0.0084 0.0058

Mercury -113391-02-02 13:55 J -39694607.03 -39694606.92 -39694606.80 0.0084 0.0043

Mercury -113391-05-01 15:22 J -39694518.99 -39694518.86 -39694518.74 0.0084 0.0028

Mercury -113391-07-28 16:34 J -39694430.94 -39694430.81 -39694430.68 0.0084 0.0014

Mercury -113391-10-24 17:46 J -39694342.89 -39694342.76 -39694342.62 0.0084 0.0003

Mercury -113390-01-20 19:12 J -39694254.83 -39694254.70 -39694254.57 0.0084 0.0015

Mercury -113390-04-18 20:24 J -39694166.78 -39694166.65 -39694166.52 0.0084 0.0029

Mercury -113390-07-15 21:36 J -39694078.71 -39694078.60 -39694078.48 0.0083 0.0044

Mercury -113390-10-11 22:34 J -39693990.64 -39693990.56 -39693990.45 0.0083 0.0059

Mercury -113389-01-08 00:00 J -39693902.56 -39693902.50 -39693902.43 0.0083 0.0072

Earth -113385-06-29 13:26 J -39692268.04 -39692267.94 -39692267.83 0.0081 0.0072

Moon -113385-06-29 13:12 J -39692268.02 -39692267.95 -39692267.85 0.0081 0.0075 \*

Venus -113384-06-16 01:26 J -39691916.53 -39691916.44 -39691916.36 0.0080 0.0073

Moon -113384-07-01 12:58 J -39691901.07 -39691900.96 -39691900.81 0.0080 0.0068

Earth -113384-07-01 14:53 J -39691901.00 -39691900.88 -39691900.72 0.0080 0.0065 \*  
 Venus -113383-01-27 10:19 J -39691691.28 -39691691.07 -39691690.86 0.0080 0.0002  
 Venus -113383-09-09 18:29 J -39691465.77 -39691465.73 -39691465.63 0.0079 0.0076  
 Mercury -113237-02-14 12:14 J -39638346.99 -39638346.99 -39638346.97 0.0060 0.0060  
 Mercury -113237-05-12 13:41 J -39638259.02 -39638258.93 -39638258.83 0.0060 0.0052  
 Mercury -113237-08-08 14:38 J -39638170.99 -39638170.89 -39638170.74 0.0060 0.0045  
 Mercury -113237-11-04 16:19 J -39638082.96 -39638082.82 -39638082.66 0.0060 0.0037  
 Mercury -113236-01-31 18:00 J -39637994.92 -39637994.75 -39637994.58 0.0060 0.0030  
 Mercury -113236-04-29 18:58 J -39637906.87 -39637906.71 -39637906.51 0.0060 0.0023  
 Mercury -113236-07-26 20:38 J -39637818.82 -39637818.64 -39637818.45 0.0060 0.0014  
 Mercury -113236-10-22 22:05 J -39637730.77 -39637730.58 -39637730.38 0.0060 0.0007  
 Mercury -113235-01-18 23:31 J -39637642.71 -39637642.52 -39637642.32 0.0060 0.0001  
 Mercury -113235-04-17 00:58 J -39637554.65 -39637554.46 -39637554.27 0.0060 0.0009  
 Mercury -113235-07-14 02:10 J -39637466.59 -39637466.41 -39637466.22 0.0060 0.0017  
 Mercury -113235-10-10 03:22 J -39637378.52 -39637378.36 -39637378.17 0.0061 0.0025  
 Mercury -113234-01-06 04:34 J -39637290.45 -39637290.31 -39637290.12 0.0061 0.0033  
 Mercury -113234-04-04 06:29 J -39637202.37 -39637202.23 -39637202.08 0.0061 0.0040  
 Mercury -113234-07-01 07:41 J -39637114.29 -39637114.18 -39637114.05 0.0061 0.0048  
 Mercury -113234-09-27 08:53 J -39637026.18 -39637026.13 -39637026.03 0.0061 0.0056  
 Moon -113224-01-03 06:58 J -39633640.47 -39633640.21 -39633639.94 0.0064 0.0004  
 Earth -113224-01-03 10:34 J -39633640.33 -39633640.06 -39633639.79 0.0064 0.0000 \*  
 Venus -113224-09-18 16:34 J -39633381.92 -39633381.81 -39633381.65 0.0064 0.0052  
 Mars -113224-12-07 19:12 J -39633301.97 -39633301.70 -39633301.41 0.0064 0.0021  
 Venus -113223-05-01 21:50 J -39633156.81 -39633156.59 -39633156.36 0.0064 0.0011  
 Venus -113223-12-13 02:53 J -39632931.58 -39632931.38 -39632931.18 0.0064 0.0031  
 Mercury -113144-12-02 17:31 J -39604086.78 -39604086.77 -39604086.74 0.0085 0.0084  
 Mercury -113143-02-28 18:58 J -39603998.78 -39603998.71 -39603998.63 0.0084 0.0069  
 Mercury -113143-05-27 19:55 J -39603910.76 -39603910.67 -39603910.55 0.0084 0.0055  
 Mercury -113143-08-23 21:22 J -39603822.72 -39603822.61 -39603822.48 0.0084 0.0040  
 Mercury -113143-11-19 22:48 J -39603734.68 -39603734.55 -39603734.42 0.0084 0.0025

Mercury -113142-02-16 00:00 J -39603646.63 -39603646.50 -39603646.36 0.0084 0.0011

Mercury -113142-05-15 01:26 J -39603558.58 -39603558.44 -39603558.31 0.0084 0.0005

Mercury -113142-08-11 02:38 J -39603470.52 -39603470.39 -39603470.26 0.0084 0.0019

Mercury -113142-11-07 03:50 J -39603382.46 -39603382.34 -39603382.21 0.0084 0.0033

Mercury -113141-02-03 05:02 J -39603294.39 -39603294.29 -39603294.17 0.0083 0.0047

Mercury -113141-05-01 06:14 J -39603206.32 -39603206.24 -39603206.14 0.0083 0.0062

Mercury -113141-07-28 07:41 J -39603118.23 -39603118.18 -39603118.13 0.0083 0.0075

Earth -113136-07-02 07:55 J -39601318.40 -39601318.17 -39601317.91 0.0080 0.0013

Moon -113136-07-02 11:31 J -39601318.27 -39601318.02 -39601317.77 0.0080 0.0011 \*

Venus -113136-12-30 05:02 J -39601137.41 -39601137.29 -39601137.13 0.0080 0.0059

Venus -113135-08-12 14:10 J -39600912.11 -39600911.91 -39600911.69 0.0080 0.0016

# 113TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 113th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-112989-09-03 18:58 J	-39547562.77	-39547562.71	-39547562.63	0.0060	0.0055		
Mercury	-112989-11-30 19:55 J	-39547474.76	-39547474.67	-39547474.53	0.0060	0.0048		
Mercury	-112988-02-26 21:36 J	-39547386.73	-39547386.60	-39547386.44	0.0060	0.0040		
Mercury	-112988-05-25 22:48 J	-39547298.69	-39547298.55	-39547298.37	0.0060	0.0033		
Mercury	-112988-08-22 00:29 J	-39547210.65	-39547210.48	-39547210.30	0.0060	0.0025		
Mercury	-112988-11-18 01:55 J	-39547122.60	-39547122.42	-39547122.23	0.0060	0.0018		

Mercury -112987-02-14 03:07 J -39547034.55 -39547034.37 -39547034.16 0.0060 0.0011

Mercury -112987-05-13 04:48 J -39546946.49 -39546946.30 -39546946.10 0.0060 0.0002

Mercury -112987-08-09 06:14 J -39546858.43 -39546858.24 -39546858.05 0.0060 0.0006

Mercury -112987-11-05 07:26 J -39546770.37 -39546770.19 -39546769.99 0.0060 0.0014

Mercury -112986-02-01 08:38 J -39546682.30 -39546682.14 -39546681.94 0.0061 0.0022

Mercury -112986-04-30 10:19 J -39546594.23 -39546594.07 -39546593.89 0.0061 0.0029

Mercury -112986-07-27 11:31 J -39546506.16 -39546506.02 -39546505.85 0.0061 0.0037

Mercury -112986-10-23 12:43 J -39546418.08 -39546417.97 -39546417.82 0.0061 0.0045

Mercury -112985-01-19 14:10 J -39546329.98 -39546329.91 -39546329.79 0.0061 0.0053

Mercury -112985-04-16 16:05 J -39546241.85 -39546241.83 -39546241.81 0.0061 0.0060

Earth -112976-01-04 08:24 J -39543057.34 -39543057.15 -39543056.91 0.0064 0.0040

Moon -112976-01-04 10:19 J -39543057.27 -39543057.07 -39543056.83 0.0064 0.0040 \*

Earth -112975-01-05 23:02 J -39542690.74 -39542690.54 -39542690.28 0.0064 0.0035

Moon -112975-01-05 23:17 J -39542690.73 -39542690.53 -39542690.29 0.0064 0.0034 \*

Mars -112975-03-17 03:07 J -39542620.66 -39542620.37 -39542620.06 0.0064 0.0007

Venus -112975-04-03 21:07 J -39542602.78 -39542602.62 -39542602.41 0.0064 0.0037

Venus -112975-11-15 02:38 J -39542377.62 -39542377.39 -39542377.16 0.0064 0.0005

Venus -112974-06-28 06:58 J -39542152.34 -39542152.21 -39542152.02 0.0065 0.0047

Mercury -112895-06-23 01:55 J -39513302.48 -39513302.42 -39513302.35 0.0084 0.0074

Mercury -112895-09-19 03:07 J -39513214.45 -39513214.37 -39513214.27 0.0084 0.0059

Mercury -112895-12-16 04:34 J -39513126.42 -39513126.31 -39513126.19 0.0084 0.0044

Mercury -112894-03-14 05:46 J -39513038.38 -39513038.26 -39513038.13 0.0084 0.0030

Mercury -112894-06-10 07:12 J -39512950.33 -39512950.20 -39512950.07 0.0084 0.0015

Mercury -112894-09-06 08:24 J -39512862.28 -39512862.15 -39512862.01 0.0084 0.0002

Mercury -112894-12-03 09:36 J -39512774.23 -39512774.10 -39512773.96 0.0084 0.0014

Mercury -112893-02-29 11:02 J -39512686.17 -39512686.04 -39512685.92 0.0084 0.0028

Mercury -112893-05-27 12:00 J -39512598.10 -39512598.00 -39512597.87 0.0083 0.0043

Mercury -112893-08-23 13:12 J -39512510.03 -39512509.95 -39512509.84 0.0083 0.0057

Mercury -112893-11-19 14:38 J -39512421.95 -39512421.89 -39512421.82 0.0083 0.0070

Earth -112888-07-03 05:17 J -39510735.33 -39510735.28 -39510735.21 0.0081 0.0078

Earth -112887-07-05 06:29 J -39510368.37 -39510368.23 -39510368.03 0.0080 0.0059  
 Moon -112887-07-05 07:12 J -39510368.36 -39510368.20 -39510368.04 0.0080 0.0062 \*  
 Venus -112887-07-15 11:46 J -39510358.19 -39510358.01 -39510357.81 0.0080 0.0035  
 Venus -112886-02-25 20:53 J -39510132.81 -39510132.63 -39510132.44 0.0080 0.0039  
 Mercury -112741-12-26 23:31 J -39456866.52 -39456866.52 -39456866.48 0.0060 0.0060  
 Mercury -112740-03-25 00:58 J -39456778.54 -39456778.46 -39456778.35 0.0060 0.0052  
 Mercury -112740-06-21 02:38 J -39456690.52 -39456690.39 -39456690.26 0.0060 0.0044  
 Mercury -112740-09-17 03:36 J -39456602.48 -39456602.35 -39456602.18 0.0060 0.0037  
 Mercury -112740-12-14 05:17 J -39456514.44 -39456514.28 -39456514.10 0.0060 0.0029  
 Mercury -112739-03-12 06:29 J -39456426.39 -39456426.23 -39456426.03 0.0060 0.0022  
 Mercury -112739-06-08 08:10 J -39456338.34 -39456338.16 -39456337.97 0.0060 0.0014  
 Mercury -112739-09-04 09:36 J -39456250.29 -39456250.10 -39456249.90 0.0060 0.0007  
 Mercury -112739-12-01 11:02 J -39456162.23 -39456162.04 -39456161.84 0.0060 0.0002  
 Mercury -112738-02-27 12:14 J -39456074.17 -39456073.99 -39456073.79 0.0060 0.0010  
 Mercury -112738-05-26 13:55 J -39455986.11 -39455985.92 -39455985.73 0.0060 0.0017  
 Mercury -112738-08-22 15:07 J -39455898.04 -39455897.87 -39455897.68 0.0061 0.0025  
 Mercury -112738-11-18 16:19 J -39455809.97 -39455809.82 -39455809.64 0.0061 0.0033  
 Mercury -112737-02-14 18:00 J -39455721.89 -39455721.75 -39455721.60 0.0061 0.0040  
 Mercury -112737-05-12 19:12 J -39455633.80 -39455633.70 -39455633.57 0.0061 0.0048  
 Mercury -112737-08-08 20:38 J -39455545.70 -39455545.64 -39455545.55 0.0061 0.0056  
 Moon -112727-01-06 17:02 J -39452108.05 -39452107.79 -39452107.51 0.0064 0.0012  
 Earth -112727-01-06 20:38 J -39452107.90 -39452107.64 -39452107.36 0.0064 0.0009 \*  
 Mars -112727-06-24 09:22 J -39451939.39 -39451939.11 -39451938.81 0.0064 0.0013  
 Venus -112727-10-18 01:12 J -39451823.64 -39451823.45 -39451823.22 0.0064 0.0025  
 Venus -112726-05-31 06:29 J -39451598.44 -39451598.23 -39451598.00 0.0064 0.0017  
 Venus -112725-01-11 10:48 J -39451373.11 -39451373.05 -39451372.92 0.0065 0.0059  
 Mercury -112647-10-15 08:24 J -39422606.16 -39422606.15 -39422606.11 0.0085 0.0083  
 Mercury -112646-01-11 09:50 J -39422518.16 -39422518.09 -39422518.01 0.0084 0.0068  
 Mercury -112646-04-09 11:02 J -39422430.13 -39422430.04 -39422429.93 0.0084 0.0053  
 Mercury -112646-07-06 12:29 J -39422342.10 -39422341.98 -39422341.86 0.0084 0.0039

Mercury -112646-10-02 13:41 J -39422254.05 -39422253.93 -39422253.80 0.0084 0.0024  
 Mercury -112646-12-29 15:07 J -39422166.01 -39422165.87 -39422165.74 0.0084 0.0010  
 Mercury -112645-03-26 16:19 J -39422077.95 -39422077.82 -39422077.69 0.0084 0.0005  
 Mercury -112645-06-22 17:31 J -39421989.90 -39421989.77 -39421989.64 0.0084 0.0019  
 Mercury -112645-09-18 18:43 J -39421901.84 -39421901.72 -39421901.59 0.0084 0.0033  
 Mercury -112645-12-15 19:55 J -39421813.77 -39421813.67 -39421813.55 0.0083 0.0048  
 Mercury -112644-03-13 21:22 J -39421725.70 -39421725.61 -39421725.52 0.0083 0.0062  
 Mercury -112644-06-09 22:34 J -39421637.61 -39421637.56 -39421637.51 0.0083 0.0076  
 Earth -112639-07-06 01:26 J -39419785.68 -39419785.44 -39419785.19 0.0080 0.0014  
 Moon -112639-07-06 04:34 J -39419785.54 -39419785.31 -39419785.06 0.0080 0.0017 \*  
 Venus -112638-01-28 17:02 J -39419579.00 -39419578.79 -39419578.58 0.0080 0.0017  
 Venus -112638-09-11 01:26 J -39419353.57 -39419353.44 -39419353.27 0.0080 0.0057  
 Mercury -112492-07-17 06:58 J -39366082.29 -39366082.21 -39366082.12 0.0060 0.0053  
 Mercury -112492-10-13 07:55 J -39365994.27 -39365994.17 -39365994.02 0.0060 0.0046  
 Mercury -112491-01-09 09:36 J -39365906.24 -39365906.10 -39365905.94 0.0060 0.0038  
 Mercury -112491-04-07 10:48 J -39365818.20 -39365818.05 -39365817.86 0.0060 0.0031  
 Mercury -112491-07-04 12:29 J -39365730.15 -39365729.98 -39365729.79 0.0060 0.0023  
 Mercury -112491-09-30 13:55 J -39365642.10 -39365641.92 -39365641.73 0.0060 0.0016  
 Mercury -112491-12-27 15:22 J -39365554.05 -39365553.86 -39365553.66 0.0060 0.0008  
 Mercury -112490-03-25 16:48 J -39365465.99 -39365465.80 -39365465.60 0.0060 0.0001  
 Mercury -112490-06-21 18:14 J -39365377.93 -39365377.74 -39365377.55 0.0060 0.0007  
 Mercury -112490-09-17 19:26 J -39365289.87 -39365289.69 -39365289.49 0.0060 0.0015  
 Mercury -112490-12-14 21:07 J -39365201.80 -39365201.62 -39365201.44 0.0061 0.0023  
 Mercury -112489-03-11 22:19 J -39365113.73 -39365113.57 -39365113.40 0.0061 0.0031  
 Mercury -112489-06-07 23:31 J -39365025.65 -39365025.52 -39365025.35 0.0061 0.0039  
 Mercury -112489-09-04 00:43 J -39364937.57 -39364937.47 -39364937.32 0.0061 0.0047  
 Mercury -112489-12-01 02:38 J -39364849.47 -39364849.39 -39364849.30 0.0061 0.0054  
 Earth -112479-01-07 20:24 J -39361524.82 -39361524.65 -39361524.44 0.0064 0.0045  
 Moon -112479-01-07 23:31 J -39361524.70 -39361524.52 -39361524.29 0.0064 0.0042 \*  
 Venus -112479-09-20 01:55 J -39361269.55 -39361269.42 -39361269.24 0.0064 0.0047

Mars -112479-10-01 19:41 J -39361257.94 -39361257.68 -39361257.37 0.0064 0.0021  
 Moon -112478-01-09 09:36 J -39361158.31 -39361158.10 -39361157.84 0.0064 0.0027  
 Earth -112478-01-09 11:02 J -39361158.25 -39361158.04 -39361157.77 0.0064 0.0030 \*  
 Venus -112478-05-03 07:12 J -39361044.42 -39361044.20 -39361043.97 0.0064 0.0006  
 Venus -112478-12-14 11:46 J -39360819.18 -39360819.01 -39360818.80 0.0064 0.0036  
 Mercury -112398-05-05 17:02 J -39331821.85 -39331821.79 -39331821.70 0.0084 0.0071  
 Mercury -112398-08-01 18:29 J -39331733.82 -39331733.73 -39331733.62 0.0084 0.0056  
 Mercury -112398-10-28 19:41 J -39331645.79 -39331645.68 -39331645.55 0.0084 0.0041  
 Mercury -112397-01-24 21:07 J -39331557.74 -39331557.62 -39331557.49 0.0084 0.0027  
 Mercury -112397-04-21 22:34 J -39331469.70 -39331469.56 -39331469.43 0.0084 0.0012  
 Mercury -112397-07-18 23:46 J -39331381.64 -39331381.51 -39331381.38 0.0084 0.0002  
 Mercury -112397-10-15 00:58 J -39331293.59 -39331293.46 -39331293.33 0.0084 0.0017  
 Mercury -112396-01-11 02:10 J -39331205.53 -39331205.41 -39331205.28 0.0084 0.0031  
 Mercury -112396-04-09 03:22 J -39331117.47 -39331117.36 -39331117.24 0.0083 0.0045  
 Mercury -112396-07-06 04:34 J -39331029.40 -39331029.31 -39331029.21 0.0083 0.0059  
 Mercury -112396-10-02 05:46 J -39330941.31 -39330941.26 -39330941.19 0.0083 0.0073  
 Moon -112391-07-06 21:22 J -39329202.66 -39329202.61 -39329202.52 0.0080 0.0077  
 Earth -112391-07-07 00:29 J -39329202.57 -39329202.48 -39329202.37 0.0080 0.0074 \*  
 Venus -112391-12-31 15:07 J -39329024.98 -39329024.87 -39329024.72 0.0080 0.0063  
 Earth -112390-07-09 01:55 J -39328835.56 -39328835.42 -39328835.25 0.0080 0.0062  
 Moon -112390-07-09 03:22 J -39328835.49 -39328835.36 -39328835.19 0.0080 0.0064 \*  
 Venus -112390-08-14 00:43 J -39328799.68 -39328799.47 -39328799.26 0.0080 0.0012  
 Mercury -112244-11-08 12:29 J -39275386.05 -39275385.98 -39275385.91 0.0060 0.0055  
 Mercury -112243-02-04 13:26 J -39275298.03 -39275297.94 -39275297.80 0.0060 0.0048  
 Mercury -112243-05-03 15:07 J -39275210.00 -39275209.87 -39275209.72 0.0060 0.0040  
 Mercury -112243-07-30 16:19 J -39275121.97 -39275121.82 -39275121.64 0.0060 0.0033  
 Mercury -112243-10-26 17:46 J -39275033.92 -39275033.76 -39275033.57 0.0060 0.0026  
 Mercury -112242-01-22 19:26 J -39274945.87 -39274945.69 -39274945.50 0.0060 0.0018  
 Mercury -112242-04-20 20:38 J -39274857.82 -39274857.64 -39274857.44 0.0060 0.0011  
 Mercury -112242-07-17 22:19 J -39274769.76 -39274769.57 -39274769.38 0.0060 0.0002



Mercury -112242-10-13 23:46 J -39274681.70 -39274681.51 -39274681.32 0.0060 0.0005  
 Mercury -112241-01-10 00:58 J -39274593.64 -39274593.46 -39274593.26 0.0060 0.0013  
 Mercury -112241-04-07 02:24 J -39274505.58 -39274505.40 -39274505.21 0.0060 0.0021  
 Mercury -112241-07-04 03:36 J -39274417.50 -39274417.35 -39274417.16 0.0061 0.0029  
 Mercury -112241-09-30 05:02 J -39274329.43 -39274329.29 -39274329.12 0.0061 0.0037  
 Mercury -112241-12-27 06:43 J -39274241.35 -39274241.22 -39274241.08 0.0061 0.0044  
 Mercury -112240-03-25 07:55 J -39274153.25 -39274153.17 -39274153.06 0.0061 0.0052  
 Mercury -112240-06-21 09:07 J -39274065.13 -39274065.12 -39274065.07 0.0061 0.0060  
 Mars -112230-01-09 04:48 J -39270576.53 -39270576.30 -39270576.02 0.0064 0.0032  
 Moon -112230-01-10 09:22 J -39270575.38 -39270575.11 -39270574.82 0.0064 0.0009  
 Earth -112230-01-10 11:17 J -39270575.30 -39270575.03 -39270574.76 0.0064 0.0008 \*  
 Venus -112230-04-05 07:26 J -39270490.38 -39270490.19 -39270489.98 0.0064 0.0030  
 Venus -112230-11-16 12:29 J -39270265.20 -39270264.98 -39270264.75 0.0064 0.0011  
 Venus -112229-06-28 17:02 J -39270039.90 -39270039.79 -39270039.63 0.0064 0.0053  
 Mercury -112150-08-28 00:14 J -39241125.54 -39241125.49 -39241125.41 0.0084 0.0075  
 Mercury -112150-11-24 01:41 J -39241037.51 -39241037.43 -39241037.33 0.0084 0.0060  
 Mercury -112149-02-20 02:53 J -39240949.48 -39240949.38 -39240949.25 0.0084 0.0046  
 Mercury -112149-05-18 04:34 J -39240861.44 -39240861.31 -39240861.19 0.0084 0.0030  
 Mercury -112149-08-14 05:46 J -39240773.39 -39240773.26 -39240773.13 0.0084 0.0016  
 Mercury -112149-11-10 06:58 J -39240685.34 -39240685.21 -39240685.07 0.0084 0.0002  
 Mercury -112148-02-06 08:10 J -39240597.29 -39240597.16 -39240597.02 0.0084 0.0013  
 Mercury -112148-05-05 09:36 J -39240509.23 -39240509.10 -39240508.98 0.0084 0.0027  
 Mercury -112148-08-01 10:48 J -39240421.17 -39240421.05 -39240420.94 0.0083 0.0041  
 Mercury -112148-10-28 11:46 J -39240333.10 -39240333.01 -39240332.90 0.0083 0.0055  
 Mercury -112147-01-24 12:58 J -39240245.02 -39240244.96 -39240244.87 0.0083 0.0069  
 Mercury -112147-04-22 14:24 J -39240156.90 -39240156.90 -39240156.89 0.0083 0.0083  
 Earth -112142-07-10 00:29 J -39238252.73 -39238252.48 -39238252.23 0.0080 0.0001  
 Moon -112142-07-10 01:41 J -39238252.66 -39238252.43 -39238252.18 0.0080 0.0004 \*  
 Venus -112142-07-16 22:34 J -39238245.74 -39238245.56 -39238245.36 0.0080 0.0036  
 Venus -112141-02-27 07:41 J -39238020.36 -39238020.18 -39238019.99 0.0080 0.0039

# 112TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 112th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-111995-03-02 18:43 J	-39184689.79	-39184689.72	-39184689.62	0.0060	0.0054		
Mercury	-111995-05-29 20:24 J	-39184601.77	-39184601.65	-39184601.53	0.0060	0.0046		
Mercury	-111995-08-25 21:22 J	-39184513.74	-39184513.61	-39184513.44	0.0060	0.0039		
Mercury	-111995-11-21 23:02 J	-39184425.70	-39184425.54	-39184425.37	0.0060	0.0031		
Mercury	-111994-02-18 00:14 J	-39184337.65	-39184337.49	-39184337.29	0.0060	0.0024		
Mercury	-111994-05-17 01:55 J	-39184249.60	-39184249.42	-39184249.23	0.0060	0.0016		
Mercury	-111994-08-13 03:22 J	-39184161.55	-39184161.36	-39184161.16	0.0060	0.0009		
Mercury	-111994-11-09 04:48 J	-39184073.49	-39184073.30	-39184073.10	0.0060	0.0001		
Mercury	-111993-02-05 06:14 J	-39183985.43	-39183985.24	-39183985.04	0.0060	0.0007		
Mercury	-111993-05-03 07:26 J	-39183897.37	-39183897.19	-39183896.99	0.0060	0.0015		
Mercury	-111993-07-30 08:53 J	-39183809.30	-39183809.13	-39183808.94	0.0061	0.0022		
Mercury	-111993-10-26 10:34 J	-39183721.23	-39183721.06	-39183720.89	0.0061	0.0030		
Mercury	-111992-01-22 11:46 J	-39183633.15	-39183633.01	-39183632.85	0.0061	0.0038		
Mercury	-111992-04-20 12:58 J	-39183545.07	-39183544.96	-39183544.81	0.0061	0.0046		
Mercury	-111992-07-17 14:10 J	-39183456.97	-39183456.91	-39183456.79	0.0061	0.0054		
Earth	-111982-01-11 13:55 J	-39179992.11	-39179991.92	-39179991.67	0.0064	0.0038		
Moon	-111982-01-11 18:14 J	-39179991.96	-39179991.74	-39179991.51	0.0064	0.0034	*	

Venus -111982-03-08 10:05 J -39179936.22 -39179936.08 -39179935.91 0.0064 0.0046  
 Mars -111982-04-18 19:41 J -39179894.93 -39179894.68 -39179894.40 0.0064 0.0029  
 Venus -111982-10-19 15:22 J -39179711.09 -39179710.86 -39179710.63 0.0064 0.0005  
 Moon -111981-01-13 01:26 J -39179625.64 -39179625.44 -39179625.19 0.0064 0.0035  
 Earth -111981-01-13 04:48 J -39179625.49 -39179625.30 -39179625.05 0.0064 0.0038 \*  
 Venus -111981-05-31 19:41 J -39179485.84 -39179485.68 -39179485.46 0.0064 0.0037  
 Mercury -111902-12-20 08:24 J -39150429.20 -39150429.15 -39150429.06 0.0084 0.0072  
 Mercury -111901-03-17 09:50 J -39150341.18 -39150341.09 -39150340.98 0.0084 0.0057  
 Mercury -111901-06-13 11:02 J -39150253.14 -39150253.04 -39150252.91 0.0084 0.0043  
 Mercury -111901-09-09 12:43 J -39150165.10 -39150164.97 -39150164.85 0.0084 0.0028  
 Mercury -111901-12-06 13:55 J -39150077.05 -39150076.92 -39150076.79 0.0084 0.0013  
 Mercury -111900-03-04 15:07 J -39149989.00 -39149988.87 -39149988.73 0.0084 0.0001  
 Mercury -111900-05-31 16:19 J -39149900.95 -39149900.82 -39149900.68 0.0084 0.0016  
 Mercury -111900-08-27 17:31 J -39149812.89 -39149812.77 -39149812.64 0.0084 0.0030  
 Mercury -111900-11-23 18:43 J -39149724.83 -39149724.72 -39149724.60 0.0083 0.0044  
 Mercury -111899-02-19 20:10 J -39149636.76 -39149636.66 -39149636.56 0.0083 0.0058  
 Mercury -111899-05-18 21:22 J -39149548.67 -39149548.61 -39149548.54 0.0083 0.0071  
 Venus -111894-06-18 23:02 J -39147691.62 -39147691.54 -39147691.41 0.0080 0.0071  
 Moon -111894-07-10 23:31 J -39147669.70 -39147669.52 -39147669.30 0.0080 0.0047  
 Earth -111894-07-11 02:53 J -39147669.56 -39147669.38 -39147669.16 0.0080 0.0048 \*  
 Venus -111893-01-30 08:53 J -39147466.35 -39147466.13 -39147465.92 0.0080 0.0005  
 Venus -111893-09-11 17:31 J -39147240.79 -39147240.77 -39147240.73 0.0080 0.0079  
 Mercury -111747-06-25 00:58 J -39093993.53 -39093993.46 -39093993.34 0.0060 0.0053  
 Mercury -111747-09-21 02:38 J -39093905.50 -39093905.39 -39093905.25 0.0060 0.0045  
 Mercury -111747-12-18 04:19 J -39093817.47 -39093817.32 -39093817.17 0.0060 0.0037  
 Mercury -111746-03-16 05:17 J -39093729.43 -39093729.28 -39093729.09 0.0060 0.0030  
 Mercury -111746-06-12 06:58 J -39093641.38 -39093641.21 -39093641.02 0.0060 0.0022  
 Mercury -111746-09-08 08:10 J -39093553.33 -39093553.16 -39093552.96 0.0060 0.0016  
 Mercury -111746-12-05 09:50 J -39093465.28 -39093465.09 -39093464.89 0.0060 0.0007  
 Mercury -111745-03-02 11:17 J -39093377.22 -39093377.03 -39093376.83 0.0060 0.0001

Mercury -111745-05-29 12:43 J -39093289.16 -39093288.97 -39093288.77 0.0060 0.0008

Mercury -111745-08-25 14:10 J -39093201.10 -39093200.91 -39093200.72 0.0060 0.0016

Mercury -111745-11-21 15:22 J -39093113.03 -39093112.86 -39093112.67 0.0061 0.0024

Mercury -111744-02-17 16:34 J -39093024.95 -39093024.81 -39093024.62 0.0061 0.0032

Mercury -111744-05-16 18:00 J -39092936.88 -39092936.75 -39092936.58 0.0061 0.0040

Mercury -111744-08-12 19:41 J -39092848.79 -39092848.68 -39092848.55 0.0061 0.0047

Mercury -111744-11-08 20:53 J -39092760.69 -39092760.63 -39092760.53 0.0061 0.0055

Venus -111734-02-08 12:43 J -39089382.00 -39089381.97 -39089381.90 0.0064 0.0062

Mars -111734-07-27 11:17 J -39089213.27 -39089213.03 -39089212.73 0.0064 0.0027

Venus -111734-09-21 17:31 J -39089156.97 -39089156.77 -39089156.54 0.0064 0.0022

Moon -111733-01-14 08:10 J -39089042.43 -39089042.16 -39089041.87 0.0064 0.0010

Earth -111733-01-14 08:24 J -39089042.41 -39089042.15 -39089041.88 0.0064 0.0008 \*

Venus -111733-05-03 22:34 J -39088931.77 -39088931.56 -39088931.33 0.0064 0.0020

Venus -111733-12-15 02:53 J -39088706.41 -39088706.38 -39088706.27 0.0064 0.0062

Mercury -111653-01-15 15:36 J -39059820.87 -39059820.85 -39059820.81 0.0085 0.0082

Mercury -111653-04-12 16:48 J -39059732.87 -39059732.80 -39059732.71 0.0084 0.0068

Mercury -111653-07-09 18:29 J -39059644.84 -39059644.73 -39059644.63 0.0084 0.0053

Mercury -111653-10-05 19:26 J -39059556.80 -39059556.69 -39059556.56 0.0084 0.0039

Mercury -111652-01-01 20:53 J -39059468.76 -39059468.63 -39059468.50 0.0084 0.0024

Mercury -111652-03-30 22:05 J -39059380.71 -39059380.58 -39059380.44 0.0084 0.0010

Mercury -111652-06-26 23:31 J -39059292.66 -39059292.52 -39059292.39 0.0084 0.0005

Mercury -111652-09-23 00:43 J -39059204.60 -39059204.47 -39059204.34 0.0084 0.0019

Mercury -111652-12-20 01:55 J -39059116.54 -39059116.42 -39059116.30 0.0084 0.0033

Mercury -111651-03-18 02:53 J -39059028.47 -39059028.38 -39059028.26 0.0083 0.0048

Mercury -111651-06-14 04:05 J -39058940.40 -39058940.33 -39058940.22 0.0083 0.0062

Mercury -111651-09-10 05:17 J -39058852.32 -39058852.28 -39058852.21 0.0083 0.0075

Venus -111645-01-02 10:05 J -39056912.27 -39056912.08 -39056911.87 0.0080 0.0027

Moon -111645-07-13 07:41 J -39056719.37 -39056719.18 -39056718.95 0.0080 0.0040

Earth -111645-07-13 08:09 J -39056719.35 -39056719.16 -39056718.94 0.0080 0.0043 \*

Venus -111645-08-14 19:12 J -39056686.87 -39056686.70 -39056686.53 0.0080 0.0047

Mercury -111499-07-21 07:12 J -39003385.25 -39003385.20 -39003385.10 0.0060 0.0055

Mercury -111499-10-17 08:53 J -39003297.24 -39003297.13 -39003297.00 0.0060 0.0047

Mercury -111498-01-13 10:05 J -39003209.21 -39003209.08 -39003208.92 0.0060 0.0040

Mercury -111498-04-11 11:45 J -39003121.17 -39003121.01 -39003120.84 0.0060 0.0032

Mercury -111498-07-08 12:57 J -39003033.12 -39003032.96 -39003032.77 0.0060 0.0025

Mercury -111498-10-04 14:24 J -39002945.07 -39002944.90 -39002944.70 0.0060 0.0018

Mercury -111498-12-31 16:05 J -39002857.02 -39002856.83 -39002856.64 0.0060 0.0010

Mercury -111497-03-28 17:31 J -39002768.96 -39002768.77 -39002768.57 0.0060 0.0002

Mercury -111497-06-24 18:57 J -39002680.90 -39002680.71 -39002680.52 0.0060 0.0006

Mercury -111497-09-20 20:09 J -39002592.84 -39002592.66 -39002592.46 0.0060 0.0014

Mercury -111497-12-17 21:21 J -39002504.77 -39002504.61 -39002504.41 0.0061 0.0022

Mercury -111496-03-15 23:02 J -39002416.70 -39002416.54 -39002416.36 0.0061 0.0029

Mercury -111496-06-12 00:14 J -39002328.63 -39002328.49 -39002328.32 0.0061 0.0037

Mercury -111496-09-08 01:41 J -39002240.54 -39002240.43 -39002240.28 0.0061 0.0045

Mercury -111496-12-05 02:53 J -39002152.45 -39002152.38 -39002152.26 0.0061 0.0053

Mercury -111495-03-03 04:48 J -39002064.32 -39002064.30 -39002064.27 0.0061 0.0060

Venus -111486-08-24 22:33 J -38998602.74 -38998602.56 -38998602.33 0.0064 0.0030

Mars -111486-11-04 10:19 J -38998531.36 -38998531.07 -38998530.77 0.0064 0.0010

Earth -111485-01-15 15:36 J -38998459.10 -38998458.85 -38998458.57 0.0064 0.0013

Moon -111485-01-15 18:43 J -38998458.98 -38998458.72 -38998458.45 0.0064 0.0011 \*

Venus -111485-04-06 03:50 J -38998377.56 -38998377.34 -38998377.11 0.0064 0.0011

Venus -111485-11-17 08:38 J -38998152.26 -38998152.14 -38998152.00 0.0064 0.0053

Moon -111484-01-16 02:53 J -38998092.45 -38998092.38 -38998092.27 0.0064 0.0061

Earth -111484-01-16 06:14 J -38998092.27 -38998092.24 -38998092.15 0.0064 0.0063 \*

Mercury -111405-05-09 00:43 J -38969124.53 -38969124.47 -38969124.39 0.0084 0.0072

Mercury -111405-08-05 01:55 J -38969036.50 -38969036.42 -38969036.31 0.0084 0.0058

Mercury -111405-11-01 03:36 J -38968948.47 -38968948.35 -38968948.24 0.0084 0.0042

Mercury -111404-01-28 04:48 J -38968860.42 -38968860.30 -38968860.17 0.0084 0.0028

Mercury -111404-04-26 06:00 J -38968772.38 -38968772.25 -38968772.11 0.0084 0.0014

Mercury -111404-07-23 07:26 J -38968684.33 -38968684.19 -38968684.06 0.0084 0.0002

Mercury -111404-10-19 08:38 J -38968596.27 -38968596.14 -38968596.01 0.0084 0.0015

Mercury -111403-01-15 09:50 J -38968508.21 -38968508.09 -38968507.96 0.0084 0.0029

Mercury -111403-04-13 11:02 J -38968420.15 -38968420.04 -38968419.92 0.0083 0.0043

Mercury -111403-07-10 12:14 J -38968332.08 -38968331.99 -38968331.89 0.0083 0.0057

Mercury -111403-10-06 13:26 J -38968244.00 -38968243.94 -38968243.86 0.0083 0.0070

Venus -111398-12-05 13:55 J -38966358.08 -38966357.92 -38966357.73 0.0080 0.0047

Moon -111397-07-14 14:09 J -38966136.16 -38966135.91 -38966135.66 0.0080 0.0015

Earth -111397-07-14 16:48 J -38966136.05 -38966135.80 -38966135.56 0.0080 0.0012 \*

Venus -111397-07-17 23:02 J -38966132.73 -38966132.54 -38966132.33 0.0080 0.0028

Mercury -111251-08-16 13:26 J -38912776.98 -38912776.94 -38912776.86 0.0060 0.0057

Mercury -111251-11-12 14:38 J -38912688.97 -38912688.89 -38912688.75 0.0060 0.0050

Mercury -111250-02-08 16:19 J -38912600.94 -38912600.82 -38912600.66 0.0060 0.0042

Mercury -111250-05-07 18:00 J -38912512.90 -38912512.75 -38912512.59 0.0060 0.0035

Mercury -111250-08-03 19:12 J -38912424.86 -38912424.70 -38912424.51 0.0060 0.0027

Mercury -111250-10-30 20:53 J -38912336.81 -38912336.63 -38912336.44 0.0060 0.0019

Mercury -111249-01-26 22:05 J -38912248.76 -38912248.58 -38912248.38 0.0060 0.0012

Mercury -111249-04-23 23:45 J -38912160.70 -38912160.51 -38912160.32 0.0060 0.0004

Mercury -111249-07-21 01:12 J -38912072.65 -38912072.45 -38912072.26 0.0060 0.0003

Mercury -111249-10-17 02:24 J -38911984.58 -38911984.40 -38911984.20 0.0060 0.0011

Mercury -111248-01-13 03:50 J -38911896.52 -38911896.34 -38911896.15 0.0061 0.0019

Mercury -111248-04-11 05:17 J -38911808.45 -38911808.28 -38911808.10 0.0061 0.0027

Mercury -111248-07-08 06:29 J -38911720.37 -38911720.23 -38911720.05 0.0061 0.0035

Mercury -111248-10-04 08:09 J -38911632.29 -38911632.16 -38911632.01 0.0061 0.0042

Mercury -111248-12-31 09:21 J -38911544.20 -38911544.11 -38911543.98 0.0061 0.0050

Mercury -111247-03-29 10:48 J -38911456.09 -38911456.05 -38911455.98 0.0061 0.0058

Venus -111238-07-28 04:05 J -38908048.51 -38908048.33 -38908048.14 0.0064 0.0037

Moon -111237-01-16 18:57 J -38907875.90 -38907875.71 -38907875.46 0.0064 0.0037

Earth -111237-01-16 22:33 J -38907875.77 -38907875.56 -38907875.30 0.0064 0.0033 \*

Mars -111237-02-12 07:41 J -38907849.46 -38907849.18 -38907848.87 0.0064 0.0007

Venus -111237-03-09 08:53 J -38907823.36 -38907823.13 -38907822.90 0.0064 0.0003

Venus -111237-10-20 13:41 J -38907598.08 -38907597.93 -38907597.75 0.0064 0.0045

Earth -111236-01-17 13:12 J -38907509.12 -38907508.95 -38907508.72 0.0064 0.0043

Moon -111236-01-17 16:19 J -38907508.99 -38907508.82 -38907508.59 0.0064 0.0046 \*

Mercury -111157-06-04 09:07 J -38878516.18 -38878516.12 -38878516.06 0.0084 0.0074

Mercury -111157-08-31 10:19 J -38878428.16 -38878428.07 -38878427.97 0.0084 0.0059

Mercury -111157-11-27 11:31 J -38878340.12 -38878340.02 -38878339.90 0.0084 0.0045

Mercury -111156-02-23 12:57 J -38878252.08 -38878251.96 -38878251.83 0.0084 0.0031

Mercury -111156-05-22 14:09 J -38878164.04 -38878163.91 -38878163.77 0.0084 0.0016

Mercury -111156-08-18 15:36 J -38878075.99 -38878075.85 -38878075.72 0.0084 0.0003

Mercury -111156-11-14 16:48 J -38877987.93 -38877987.80 -38877987.67 0.0084 0.0012

Mercury -111155-02-10 18:00 J -38877899.87 -38877899.75 -38877899.62 0.0084 0.0026

Mercury -111155-05-09 19:12 J -38877811.81 -38877811.70 -38877811.58 0.0083 0.0040

Mercury -111155-08-05 20:24 J -38877723.74 -38877723.65 -38877723.54 0.0083 0.0054

Mercury -111155-11-01 21:36 J -38877635.67 -38877635.60 -38877635.52 0.0083 0.0068

Mercury -111154-01-28 22:33 J -38877547.56 -38877547.56 -38877547.52 0.0083 0.0082

Venus -111150-11-07 18:57 J -38875803.82 -38875803.71 -38875803.56 0.0080 0.0063

Venus -111149-06-20 04:19 J -38875578.52 -38875578.32 -38875578.10 0.0080 0.0014

Earth -111149-07-16 02:24 J -38875552.64 -38875552.40 -38875552.15 0.0080 0.0014

Moon -111149-07-16 05:45 J -38875552.50 -38875552.26 -38875552.01 0.0080 0.0011 \*

Mercury -111003-09-11 20:38 J -38822168.69 -38822168.64 -38822168.55 0.0060 0.0056

Mercury -111003-12-08 22:19 J -38822080.68 -38822080.57 -38822080.45 0.0060 0.0048

Mercury -111002-03-06 23:31 J -38821992.65 -38821992.52 -38821992.36 0.0060 0.0041

Mercury -111002-06-03 01:12 J -38821904.61 -38821904.45 -38821904.29 0.0060 0.0033

Mercury -111002-08-30 02:09 J -38821816.57 -38821816.41 -38821816.21 0.0060 0.0027

Mercury -111002-11-26 03:50 J -38821728.52 -38821728.34 -38821728.15 0.0060 0.0019

Mercury -111001-02-22 05:31 J -38821640.46 -38821640.27 -38821640.08 0.0060 0.0011

Mercury -111001-05-20 06:43 J -38821552.41 -38821552.22 -38821552.02 0.0060 0.0004

Mercury -111001-08-16 08:09 J -38821464.35 -38821464.16 -38821463.96 0.0060 0.0005

Mercury -111001-11-12 09:36 J -38821376.29 -38821376.10 -38821375.90 0.0060 0.0012

# 111TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 111th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-111000-02-08 11:02 J	-38821288.22	-38821288.04	-38821287.85	0.0061	0.0020		
Mercury	-111000-05-07 12:14 J	-38821200.15	-38821199.99	-38821199.80	0.0061	0.0028		
Mercury	-111000-08-03 13:41 J	-38821112.07	-38821111.93	-38821111.76	0.0061	0.0036		
Mercury	-111000-10-30 15:21 J	-38821023.99	-38821023.86	-38821023.72	0.0061	0.0043		
Mercury	-110999-01-26 16:33 J	-38820935.90	-38820935.81	-38820935.69	0.0061	0.0051		
Mercury	-110999-04-24 17:45 J	-38820847.78	-38820847.76	-38820847.69	0.0061	0.0059		
Venus	-110990-06-30 11:31 J	-38817494.19	-38817494.02	-38817493.83	0.0064	0.0038		
Earth	-110989-01-18 09:36 J	-38817292.27	-38817292.10	-38817291.89	0.0064	0.0046		
Moon	-110989-01-18 11:31 J	-38817292.20	-38817292.02	-38817291.82	0.0064	0.0046	*	
Venus	-110989-02-10 16:19 J	-38817269.04	-38817268.82	-38817268.58	0.0064	0.0003		
Mars	-110989-05-22 10:48 J	-38817167.27	-38817167.05	-38817166.78	0.0064	0.0036		
Venus	-110989-09-22 21:07 J	-38817043.78	-38817043.62	-38817043.45	0.0064	0.0044		
Earth	-110988-01-19 00:57 J	-38816925.70	-38816925.46	-38816925.22	0.0064	0.0030		
Moon	-110988-01-19 00:57 J	-38816925.67	-38816925.46	-38816925.21	0.0064	0.0030	*	
Mercury	-110909-06-30 17:45 J	-38787907.82	-38787907.76	-38787907.68	0.0084	0.0072		
Mercury	-110909-09-26 18:57 J	-38787819.79	-38787819.71	-38787819.60	0.0084	0.0057		
Mercury	-110909-12-23 20:24 J	-38787731.76	-38787731.65	-38787731.53	0.0084	0.0043		



Mercury -110908-03-21 21:50 J -38787643.72 -38787643.59 -38787643.46 0.0084 0.0028  
 Mercury -110908-06-17 23:02 J -38787555.67 -38787555.54 -38787555.41 0.0084 0.0014  
 Mercury -110908-09-14 00:29 J -38787467.62 -38787467.48 -38787467.35 0.0084 0.0003  
 Mercury -110908-12-11 01:41 J -38787379.56 -38787379.43 -38787379.30 0.0084 0.0014  
 Mercury -110907-03-09 02:38 J -38787291.51 -38787291.39 -38787291.25 0.0084 0.0029  
 Mercury -110907-06-05 03:50 J -38787203.44 -38787203.34 -38787203.21 0.0083 0.0043  
 Mercury -110907-09-01 05:17 J -38787115.37 -38787115.28 -38787115.18 0.0083 0.0056  
 Mercury -110907-11-28 06:14 J -38787027.29 -38787027.24 -38787027.15 0.0083 0.0071  
 Venus -110902-10-11 01:55 J -38785249.51 -38785249.42 -38785249.29 0.0080 0.0069  
 Venus -110901-05-23 11:31 J -38785024.23 -38785024.02 -38785023.80 0.0080 0.0007  
 Moon -110901-07-17 13:26 J -38784969.15 -38784968.94 -38784968.71 0.0080 0.0033  
 Earth -110901-07-17 15:21 J -38784969.08 -38784968.86 -38784968.62 0.0080 0.0029 \*  
 Mercury -110755-10-08 03:36 J -38731560.40 -38731560.35 -38731560.25 0.0060 0.0055  
 Mercury -110754-01-04 05:31 J -38731472.39 -38731472.27 -38731472.15 0.0060 0.0047  
 Mercury -110754-04-02 06:29 J -38731384.35 -38731384.23 -38731384.06 0.0060 0.0040  
 Mercury -110754-06-29 08:09 J -38731296.31 -38731296.16 -38731295.99 0.0060 0.0033  
 Mercury -110754-09-25 09:21 J -38731208.27 -38731208.11 -38731207.92 0.0060 0.0026  
 Mercury -110754-12-22 11:02 J -38731120.22 -38731120.04 -38731119.85 0.0060 0.0018  
 Mercury -110753-03-19 12:29 J -38731032.17 -38731031.98 -38731031.78 0.0060 0.0010  
 Mercury -110753-06-15 13:55 J -38730944.11 -38730943.92 -38730943.72 0.0060 0.0003  
 Mercury -110753-09-11 15:21 J -38730856.05 -38730855.86 -38730855.66 0.0060 0.0006  
 Mercury -110753-12-08 16:33 J -38730767.99 -38730767.81 -38730767.61 0.0061 0.0014  
 Mercury -110752-03-06 18:14 J -38730679.92 -38730679.74 -38730679.56 0.0061 0.0021  
 Mercury -110752-06-02 19:26 J -38730591.85 -38730591.69 -38730591.51 0.0061 0.0029  
 Mercury -110752-08-29 20:38 J -38730503.77 -38730503.64 -38730503.46 0.0061 0.0037  
 Mercury -110752-11-25 22:19 J -38730415.69 -38730415.57 -38730415.43 0.0061 0.0044  
 Mercury -110751-02-21 23:31 J -38730327.60 -38730327.52 -38730327.40 0.0061 0.0052  
 Mercury -110751-05-21 00:57 J -38730239.47 -38730239.46 -38730239.40 0.0061 0.0060  
 Venus -110742-06-02 18:29 J -38726939.90 -38726939.73 -38726939.54 0.0064 0.0039  
 Venus -110741-01-13 23:31 J -38726714.75 -38726714.52 -38726714.29 0.0064 0.0001

Earth -110741-01-19 19:55 J -38726708.76 -38726708.67 -38726708.54 0.0064 0.0058  
 Moon -110741-01-19 21:21 J -38726708.71 -38726708.61 -38726708.45 0.0064 0.0055 \*  
 Venus -110741-08-26 03:50 J -38726489.50 -38726489.34 -38726489.15 0.0064 0.0043  
 Mars -110741-08-30 13:12 J -38726484.95 -38726484.95 -38726484.92 0.0064 0.0064  
 Moon -110740-01-20 07:41 J -38726342.44 -38726342.18 -38726341.90 0.0064 0.0014  
 Earth -110740-01-20 11:02 J -38726342.28 -38726342.04 -38726341.76 0.0064 0.0018 \*  
 Mercury -110661-04-30 01:41 J -38697387.46 -38697387.43 -38697387.40 0.0085 0.0082  
 Mercury -110661-07-27 02:38 J -38697299.45 -38697299.39 -38697299.30 0.0084 0.0068  
 Mercury -110661-10-23 04:05 J -38697211.42 -38697211.33 -38697211.22 0.0084 0.0053  
 Mercury -110660-01-19 05:31 J -38697123.39 -38697123.27 -38697123.15 0.0084 0.0038  
 Mercury -110660-04-17 06:43 J -38697035.34 -38697035.22 -38697035.09 0.0084 0.0024  
 Mercury -110660-07-14 08:09 J -38696947.29 -38696947.16 -38696947.03 0.0084 0.0010  
 Mercury -110660-10-10 09:21 J -38696859.24 -38696859.11 -38696858.98 0.0084 0.0004  
 Mercury -110659-01-06 10:33 J -38696771.19 -38696771.06 -38696770.93 0.0084 0.0018  
 Mercury -110659-04-04 11:45 J -38696683.13 -38696683.01 -38696682.88 0.0084 0.0032  
 Mercury -110659-07-01 12:57 J -38696595.06 -38696594.96 -38696594.84 0.0083 0.0046  
 Mercury -110659-09-27 14:09 J -38696506.99 -38696506.91 -38696506.81 0.0083 0.0060  
 Mercury -110659-12-24 15:36 J -38696418.91 -38696418.85 -38696418.79 0.0083 0.0074  
 Venus -110654-09-13 09:50 J -38694695.17 -38694695.09 -38694694.97 0.0081 0.0071  
 Mars -110653-02-07 21:50 J -38694547.75 -38694547.59 -38694547.40 0.0080 0.0069  
 Venus -110653-04-25 19:41 J -38694469.90 -38694469.68 -38694469.47 0.0080 0.0005  
 Moon -110653-07-19 04:48 J -38694385.50 -38694385.30 -38694385.07 0.0080 0.0042  
 Earth -110653-07-19 06:00 J -38694385.46 -38694385.25 -38694385.04 0.0080 0.0041 \*  
 Venus -110653-12-07 04:19 J -38694244.32 -38694244.32 -38694244.29 0.0080 0.0080  
 Mercury -110507-08-07 10:05 J -38641040.09 -38641040.08 -38641040.03 0.0060 0.0059  
 Mercury -110507-11-03 11:17 J -38640952.10 -38640952.03 -38640951.91 0.0060 0.0052  
 Mercury -110506-01-30 12:57 J -38640864.08 -38640863.96 -38640863.82 0.0060 0.0044  
 Mercury -110506-04-28 14:09 J -38640776.04 -38640775.91 -38640775.73 0.0060 0.0037  
 Mercury -110506-07-25 15:50 J -38640688.00 -38640687.84 -38640687.66 0.0060 0.0029  
 Mercury -110506-10-21 17:31 J -38640599.95 -38640599.77 -38640599.59 0.0060 0.0022

Mercury -110505-01-17 18:43 J -38640511.90 -38640511.72 -38640511.52 0.0060 0.0014

Mercury -110505-04-14 20:24 J -38640423.85 -38640423.65 -38640423.46 0.0060 0.0007

Mercury -110505-07-11 21:50 J -38640335.79 -38640335.59 -38640335.40 0.0060 0.0002

Mercury -110505-10-07 23:02 J -38640247.73 -38640247.54 -38640247.34 0.0060 0.0009

Mercury -110504-01-04 00:29 J -38640159.66 -38640159.48 -38640159.29 0.0061 0.0016

Mercury -110504-04-02 01:41 J -38640071.59 -38640071.43 -38640071.24 0.0061 0.0025

Mercury -110504-06-29 03:07 J -38639983.52 -38639983.37 -38639983.19 0.0061 0.0032

Mercury -110504-09-25 04:33 J -38639895.44 -38639895.31 -38639895.15 0.0061 0.0040

Mercury -110504-12-22 05:45 J -38639807.36 -38639807.26 -38639807.12 0.0061 0.0048

Mercury -110503-03-20 07:41 J -38639719.25 -38639719.18 -38639719.10 0.0061 0.0055

Venus -110494-05-06 02:38 J -38636385.55 -38636385.39 -38636385.17 0.0064 0.0036

Venus -110494-12-17 07:55 J -38636160.39 -38636160.17 -38636159.94 0.0064 0.0005

Venus -110493-07-29 12:14 J -38635935.13 -38635934.99 -38635934.81 0.0064 0.0046

Earth -110492-01-22 00:14 J -38635758.75 -38635758.49 -38635758.22 0.0064 0.0010

Moon -110492-01-22 03:50 J -38635758.62 -38635758.34 -38635758.07 0.0064 0.0011 \*

Mercury -110413-05-26 11:02 J -38606779.09 -38606779.04 -38606778.98 0.0085 0.0076

Mercury -110413-08-22 12:14 J -38606691.07 -38606690.99 -38606690.89 0.0084 0.0061

Mercury -110413-11-18 13:26 J -38606603.04 -38606602.94 -38606602.82 0.0084 0.0047

Mercury -110412-02-14 14:53 J -38606515.00 -38606514.88 -38606514.76 0.0084 0.0033

Mercury -110412-05-13 16:05 J -38606426.96 -38606426.83 -38606426.70 0.0084 0.0019

Mercury -110412-08-09 17:31 J -38606338.91 -38606338.77 -38606338.64 0.0084 0.0005

Mercury -110412-11-05 18:43 J -38606250.85 -38606250.72 -38606250.59 0.0084 0.0010

Mercury -110411-02-01 19:55 J -38606162.80 -38606162.67 -38606162.54 0.0084 0.0024

Mercury -110411-04-30 21:07 J -38606074.73 -38606074.62 -38606074.50 0.0083 0.0038

Mercury -110411-07-27 22:19 J -38605986.67 -38605986.57 -38605986.46 0.0083 0.0052

Mercury -110411-10-23 23:31 J -38605898.59 -38605898.52 -38605898.43 0.0083 0.0066

Mercury -110410-01-20 00:43 J -38605810.50 -38605810.47 -38605810.42 0.0083 0.0079

Venus -110406-08-16 18:29 J -38604140.82 -38604140.73 -38604140.60 0.0081 0.0069

Venus -110405-03-29 04:05 J -38603915.54 -38603915.33 -38603915.11 0.0080 0.0007

Mars -110405-05-18 00:29 J -38603865.81 -38603865.48 -38603865.14 0.0080 0.0013

Earth -110405-07-20 21:07 J -38603801.79 -38603801.62 -38603801.40 0.0080 0.0048  
 Moon -110405-07-21 00:43 J -38603801.66 -38603801.47 -38603801.25 0.0080 0.0043 \*  
 Mercury -110259-09-02 17:31 J -38550431.82 -38550431.77 -38550431.67 0.0060 0.0056  
 Mercury -110259-11-29 19:12 J -38550343.80 -38550343.70 -38550343.57 0.0060 0.0048  
 Mercury -110258-02-25 20:24 J -38550255.77 -38550255.65 -38550255.48 0.0060 0.0041  
 Mercury -110258-05-24 22:05 J -38550167.73 -38550167.58 -38550167.41 0.0060 0.0033  
 Mercury -110258-08-20 23:17 J -38550079.69 -38550079.53 -38550079.33 0.0060 0.0026  
 Mercury -110258-11-17 00:57 J -38549991.64 -38549991.46 -38549991.26 0.0060 0.0018  
 Mercury -110257-02-13 02:38 J -38549903.58 -38549903.39 -38549903.20 0.0060 0.0011  
 Mercury -110257-05-11 04:05 J -38549815.53 -38549815.33 -38549815.14 0.0060 0.0003  
 Mercury -110257-08-07 05:31 J -38549727.47 -38549727.27 -38549727.08 0.0060 0.0005  
 Mercury -110257-11-03 06:43 J -38549639.40 -38549639.22 -38549639.02 0.0060 0.0012  
 Mercury -110256-01-30 08:09 J -38549551.34 -38549551.16 -38549550.97 0.0061 0.0020  
 Mercury -110256-04-28 09:21 J -38549463.27 -38549463.11 -38549462.92 0.0061 0.0028  
 Mercury -110256-07-25 10:48 J -38549375.19 -38549375.05 -38549374.87 0.0061 0.0036  
 Mercury -110256-10-21 12:29 J -38549287.11 -38549286.98 -38549286.84 0.0061 0.0043  
 Mercury -110255-01-17 13:41 J -38549199.02 -38549198.93 -38549198.81 0.0061 0.0051  
 Mercury -110255-04-15 14:53 J -38549110.90 -38549110.88 -38549110.80 0.0061 0.0059  
 Venus -110246-04-08 11:17 J -38545831.22 -38545831.03 -38545830.82 0.0064 0.0032  
 Venus -110246-11-19 16:05 J -38545606.04 -38545605.83 -38545605.59 0.0064 0.0009  
 Venus -110245-07-01 20:53 J -38545380.76 -38545380.63 -38545380.47 0.0064 0.0050  
 Moon -110244-01-23 12:00 J -38545175.25 -38545175.00 -38545174.73 0.0064 0.0005  
 Earth -110244-01-23 12:57 J -38545175.23 -38545174.96 -38545174.68 0.0064 0.0002 \*  
 Mercury -110165-03-25 19:12 J -38516258.72 -38516258.70 -38516258.67 0.0085 0.0083  
 Mercury -110165-06-21 20:24 J -38516170.72 -38516170.65 -38516170.56 0.0085 0.0068  
 Mercury -110165-09-17 21:50 J -38516082.69 -38516082.59 -38516082.49 0.0084 0.0054  
 Mercury -110165-12-14 23:02 J -38515994.65 -38515994.54 -38515994.42 0.0084 0.0040  
 Mercury -110164-03-13 00:14 J -38515906.61 -38515906.49 -38515906.36 0.0084 0.0026  
 Mercury -110164-06-09 01:41 J -38515818.56 -38515818.43 -38515818.30 0.0084 0.0011  
 Mercury -110164-09-05 02:53 J -38515730.51 -38515730.38 -38515730.24 0.0084 0.0003

Mercury -110164-12-02 04:05 J -38515642.46 -38515642.33 -38515642.20 0.0084 0.0017

Mercury -110163-02-28 05:17 J -38515554.40 -38515554.28 -38515554.15 0.0084 0.0031

Mercury -110163-05-27 06:43 J -38515466.33 -38515466.22 -38515466.11 0.0083 0.0045

Mercury -110163-08-23 07:55 J -38515378.26 -38515378.17 -38515378.08 0.0083 0.0059

Mercury -110163-11-19 09:07 J -38515290.18 -38515290.12 -38515290.06 0.0083 0.0072

Venus -110158-07-20 03:50 J -38513586.46 -38513586.34 -38513586.19 0.0081 0.0063

Venus -110157-03-01 13:12 J -38513361.15 -38513360.95 -38513360.73 0.0080 0.0014

Moon -110157-07-22 11:02 J -38513218.20 -38513218.04 -38513217.82 0.0080 0.0051

Earth -110157-07-22 14:09 J -38513218.08 -38513217.91 -38513217.70 0.0080 0.0050 \*

Mercury -110011-07-03 00:28 J -38459911.51 -38459911.48 -38459911.38 0.0060 0.0057

Mercury -110011-09-29 02:24 J -38459823.50 -38459823.40 -38459823.28 0.0060 0.0049

Mercury -110011-12-26 03:36 J -38459735.47 -38459735.35 -38459735.19 0.0060 0.0042

Mercury -110010-03-24 05:16 J -38459647.43 -38459647.28 -38459647.11 0.0060 0.0034

Mercury -110010-06-20 06:28 J -38459559.39 -38459559.23 -38459559.04 0.0060 0.0027

Mercury -110010-09-16 08:09 J -38459471.34 -38459471.16 -38459470.97 0.0060 0.0019

Mercury -110010-12-13 09:50 J -38459383.28 -38459383.09 -38459382.90 0.0060 0.0012

Mercury -110009-03-10 11:02 J -38459295.23 -38459295.04 -38459294.84 0.0060 0.0005

Mercury -110009-06-06 12:43 J -38459207.17 -38459206.97 -38459206.78 0.0060 0.0004

Mercury -110009-09-02 13:55 J -38459119.10 -38459118.92 -38459118.72 0.0060 0.0011

Mercury -110009-11-29 15:21 J -38459031.04 -38459030.86 -38459030.67 0.0061 0.0019

Mercury -110008-02-25 16:33 J -38458942.97 -38458942.81 -38458942.62 0.0061 0.0027

Mercury -110008-05-24 18:28 J -38458854.89 -38458854.73 -38458854.57 0.0061 0.0034

Mercury -110008-08-20 19:26 J -38458766.81 -38458766.69 -38458766.53 0.0061 0.0042

Mercury -110008-11-16 20:52 J -38458678.72 -38458678.63 -38458678.50 0.0061 0.0050

Mercury -110007-02-12 22:04 J -38458590.61 -38458590.58 -38458590.49 0.0061 0.0058

# 110TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 110th millennium BCE.**

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
TRANSIT								
TIME								
Venus	-109999-07-29 16:33 J	-38455501.84	-38455501.81	-38455501.74	0.0064	0.0062		
Venus	-109998-03-11 21:21 J	-38455276.81	-38455276.61	-38455276.38	0.0064	0.0022		
Mars	-109998-08-06 14:09 J	-38455129.13	-38455128.91	-38455128.65	0.0064	0.0037		
Venus	-109998-10-23 02:09 J	-38455051.61	-38455051.41	-38455051.17	0.0064	0.0019		
Venus	-109997-06-04 07:12 J	-38454826.27	-38454826.20	-38454826.11	0.0064	0.0060		
Moon	-109996-01-25 02:52 J	-38454591.66	-38454591.38	-38454591.10	0.0064	0.0001		
Earth	-109996-01-25 04:48 J	-38454591.56	-38454591.30	-38454591.02	0.0064	0.0003	*	
Mercury	-109917-04-21 05:02 J	-38425650.35	-38425650.29	-38425650.21	0.0085	0.0073		
Mercury	-109917-07-18 06:14 J	-38425562.32	-38425562.24	-38425562.13	0.0084	0.0059		
Mercury	-109917-10-14 07:40 J	-38425474.29	-38425474.18	-38425474.06	0.0084	0.0044		
Mercury	-109916-01-10 09:07 J	-38425386.25	-38425386.12	-38425386.00	0.0084	0.0030		
Mercury	-109916-04-08 10:19 J	-38425298.20	-38425298.07	-38425297.94	0.0084	0.0015		
Mercury	-109916-07-05 11:31 J	-38425210.15	-38425210.02	-38425209.88	0.0084	0.0002		
Mercury	-109916-10-01 12:43 J	-38425122.10	-38425121.97	-38425121.83	0.0084	0.0013		
Mercury	-109916-12-28 13:55 J	-38425034.04	-38425033.92	-38425033.79	0.0084	0.0027		
Mercury	-109915-03-26 15:07 J	-38424945.98	-38424945.87	-38424945.74	0.0084	0.0041		
Mercury	-109915-06-22 16:19 J	-38424857.91	-38424857.82	-38424857.71	0.0083	0.0055		
Mercury	-109915-09-18 17:31 J	-38424769.83	-38424769.77	-38424769.68	0.0083	0.0068		
Mercury	-109915-12-15 18:43 J	-38424681.73	-38424681.72	-38424681.69	0.0083	0.0082		
Venus	-109910-06-22 14:24 J	-38423032.05	-38423031.90	-38423031.72	0.0081	0.0053		
Venus	-109909-02-02 23:45 J	-38422806.70	-38422806.51	-38422806.29	0.0080	0.0024		
Earth	-109909-07-24 08:38 J	-38422634.31	-38422634.14	-38422633.92	0.0080	0.0048		

Moon -109909-07-24 09:36 J -38422634.29 -38422634.10 -38422633.90 0.0080 0.0051 \*  
 Mercury -109763-05-02 09:07 J -38369391.19 -38369391.12 -38369391.04 0.0060 0.0054  
 Mercury -109763-07-29 10:19 J -38369303.18 -38369303.07 -38369302.94 0.0060 0.0047  
 Mercury -109763-10-25 11:31 J -38369215.14 -38369215.02 -38369214.85 0.0060 0.0040  
 Mercury -109762-01-21 13:12 J -38369127.10 -38369126.95 -38369126.77 0.0060 0.0032  
 Mercury -109762-04-19 14:52 J -38369039.06 -38369038.88 -38369038.70 0.0060 0.0025  
 Mercury -109762-07-16 16:04 J -38368951.01 -38368950.83 -38368950.63 0.0060 0.0017  
 Mercury -109762-10-12 17:45 J -38368862.95 -38368862.76 -38368862.57 0.0060 0.0010  
 Mercury -109761-01-08 19:12 J -38368774.89 -38368774.70 -38368774.50 0.0060 0.0002  
 Mercury -109761-04-05 20:38 J -38368686.83 -38368686.64 -38368686.44 0.0060 0.0006  
 Mercury -109761-07-02 21:50 J -38368598.77 -38368598.59 -38368598.39 0.0060 0.0014  
 Mercury -109761-09-28 23:31 J -38368510.70 -38368510.52 -38368510.34 0.0061 0.0021  
 Mercury -109761-12-26 00:43 J -38368422.63 -38368422.47 -38368422.29 0.0061 0.0029  
 Mercury -109760-03-24 01:55 J -38368334.55 -38368334.42 -38368334.24 0.0061 0.0037  
 Mercury -109760-06-20 03:36 J -38368246.47 -38368246.35 -38368246.20 0.0061 0.0044  
 Mercury -109760-09-16 04:48 J -38368158.38 -38368158.30 -38368158.18 0.0061 0.0052  
 Mercury -109760-12-13 06:14 J -38368070.25 -38368070.24 -38368070.18 0.0061 0.0060  
 Venus -109751-07-02 05:02 J -38364947.44 -38364947.29 -38364947.11 0.0064 0.0045  
 Venus -109750-02-12 10:04 J -38364722.31 -38364722.08 -38364721.85 0.0064 0.0005  
 Venus -109750-09-25 14:24 J -38364497.07 -38364496.90 -38364496.69 0.0064 0.0036  
 Mars -109750-11-15 06:43 J -38364446.50 -38364446.22 -38364445.94 0.0064 0.0023  
 Moon -109749-01-26 05:31 J -38364374.31 -38364374.27 -38364374.18 0.0064 0.0063  
 Earth -109748-01-27 00:14 J -38364007.75 -38364007.49 -38364007.22 0.0065 0.0011  
 Moon -109748-01-27 03:50 J -38364007.60 -38364007.34 -38364007.06 0.0065 0.0009 \*  
 Mercury -109670-11-23 13:40 J -38335217.95 -38335217.93 -38335217.90 0.0085 0.0083  
 Mercury -109669-02-19 14:52 J -38335129.95 -38335129.88 -38335129.79 0.0085 0.0068  
 Mercury -109669-05-17 16:19 J -38335041.92 -38335041.82 -38335041.71 0.0084 0.0054  
 Mercury -109669-08-13 17:31 J -38334953.88 -38334953.77 -38334953.65 0.0084 0.0040  
 Mercury -109669-11-09 18:57 J -38334865.84 -38334865.71 -38334865.58 0.0084 0.0025  
 Mercury -109668-02-05 20:09 J -38334777.79 -38334777.66 -38334777.53 0.0084 0.0011

Mercury -109668-05-04 21:21 J -38334689.74 -38334689.61 -38334689.47 0.0084 0.0004

Mercury -109668-07-31 22:33 J -38334601.68 -38334601.56 -38334601.42 0.0084 0.0017

Mercury -109668-10-27 23:45 J -38334513.63 -38334513.51 -38334513.38 0.0084 0.0031

Mercury -109667-01-24 00:57 J -38334425.56 -38334425.46 -38334425.34 0.0084 0.0045

Mercury -109667-04-22 02:09 J -38334337.49 -38334337.41 -38334337.31 0.0083 0.0059

Mercury -109667-07-19 03:21 J -38334249.41 -38334249.36 -38334249.28 0.0083 0.0072

Venus -109662-05-26 04:48 J -38332477.50 -38332477.30 -38332477.09 0.0081 0.0024

Venus -109661-01-06 13:55 J -38332252.07 -38332251.92 -38332251.75 0.0080 0.0052

Earth -109661-07-26 09:36 J -38332050.32 -38332050.10 -38332049.85 0.0080 0.0026

Moon -109661-07-26 11:45 J -38332050.24 -38332050.01 -38332049.78 0.0080 0.0024 \*

Mercury -109516-12-03 17:16 J -38278958.85 -38278958.78 -38278958.68 0.0060 0.0054

Mercury -109515-03-01 18:28 J -38278870.83 -38278870.73 -38278870.59 0.0060 0.0047

Mercury -109515-05-28 20:09 J -38278782.79 -38278782.66 -38278782.50 0.0060 0.0039

Mercury -109515-08-24 21:21 J -38278694.75 -38278694.61 -38278694.42 0.0060 0.0032

Mercury -109515-11-20 23:02 J -38278606.71 -38278606.54 -38278606.35 0.0060 0.0025

Mercury -109514-02-17 00:28 J -38278518.66 -38278518.48 -38278518.28 0.0060 0.0017

Mercury -109514-05-16 01:55 J -38278430.60 -38278430.42 -38278430.22 0.0060 0.0010

Mercury -109514-08-12 03:36 J -38278342.54 -38278342.35 -38278342.15 0.0060 0.0002

Mercury -109514-11-08 04:48 J -38278254.48 -38278254.30 -38278254.09 0.0060 0.0007

Mercury -109513-02-04 06:14 J -38278166.42 -38278166.24 -38278166.04 0.0061 0.0014

Mercury -109513-05-02 07:40 J -38278078.35 -38278078.18 -38278077.99 0.0061 0.0022

Mercury -109513-07-29 09:07 J -38277990.28 -38277990.12 -38277989.94 0.0061 0.0029

Mercury -109513-10-25 10:33 J -38277902.20 -38277902.06 -38277901.89 0.0061 0.0037

Mercury -109512-01-21 11:45 J -38277814.12 -38277814.01 -38277813.85 0.0061 0.0045

Mercury -109512-04-19 13:26 J -38277726.02 -38277725.94 -38277725.83 0.0061 0.0052

Mercury -109512-07-16 14:38 J -38277637.90 -38277637.89 -38277637.83 0.0061 0.0060

Venus -109504-10-22 16:04 J -38274617.91 -38274617.83 -38274617.69 0.0064 0.0056

Venus -109503-06-04 21:07 J -38274392.83 -38274392.62 -38274392.39 0.0064 0.0016

Venus -109502-01-16 01:40 J -38274167.62 -38274167.43 -38274167.20 0.0064 0.0025

Earth -109501-01-28 10:04 J -38273790.26 -38273790.08 -38273789.85 0.0064 0.0043



Moon -109501-01-28 13:55 J -38273790.09 -38273789.92 -38273789.70 0.0064 0.0045 \*  
 Moon -109500-01-28 22:48 J -38273423.75 -38273423.55 -38273423.31 0.0065 0.0037  
 Earth -109500-01-29 01:40 J -38273423.64 -38273423.43 -38273423.18 0.0065 0.0034 \*  
 Mercury -109422-06-26 23:16 J -38244785.53 -38244785.53 -38244785.49 0.0085 0.0084  
 Mercury -109422-09-23 00:57 J -38244697.53 -38244697.46 -38244697.38 0.0085 0.0069  
 Mercury -109422-12-20 02:09 J -38244609.50 -38244609.41 -38244609.30 0.0084 0.0055  
 Mercury -109421-03-17 03:21 J -38244521.47 -38244521.36 -38244521.24 0.0084 0.0041  
 Mercury -109421-06-13 04:48 J -38244433.43 -38244433.30 -38244433.17 0.0084 0.0026  
 Mercury -109421-09-09 06:00 J -38244345.38 -38244345.25 -38244345.11 0.0084 0.0012  
 Mercury -109421-12-06 07:26 J -38244257.33 -38244257.19 -38244257.06 0.0084 0.0003  
 Mercury -109420-03-04 08:38 J -38244169.27 -38244169.14 -38244169.01 0.0084 0.0016  
 Mercury -109420-05-31 09:50 J -38244081.21 -38244081.09 -38244080.97 0.0084 0.0030  
 Mercury -109420-08-27 11:02 J -38243993.15 -38243993.04 -38243992.93 0.0084 0.0044  
 Mercury -109420-11-23 12:00 J -38243905.08 -38243905.00 -38243904.89 0.0083 0.0058  
 Mercury -109419-02-19 13:12 J -38243817.00 -38243816.95 -38243816.87 0.0083 0.0071  
 Venus -109415-09-15 13:55 J -38242148.07 -38242147.92 -38242147.76 0.0081 0.0053  
 Venus -109414-04-28 23:31 J -38241922.73 -38241922.52 -38241922.32 0.0080 0.0023  
 Mars -109414-07-31 13:55 J -38241829.24 -38241828.92 -38241828.58 0.0080 0.0012  
 Moon -109413-07-28 13:55 J -38241466.15 -38241465.92 -38241465.67 0.0080 0.0020  
 Earth -109413-07-28 17:16 J -38241466.01 -38241465.78 -38241465.53 0.0080 0.0016 \*  
 Mercury -109268-04-10 01:40 J -38188614.49 -38188614.43 -38188614.36 0.0060 0.0056  
 Mercury -109268-07-07 02:52 J -38188526.47 -38188526.38 -38188526.25 0.0060 0.0049  
 Mercury -109268-10-03 04:33 J -38188438.44 -38188438.31 -38188438.16 0.0060 0.0042  
 Mercury -109268-12-30 05:45 J -38188350.40 -38188350.26 -38188350.08 0.0060 0.0034  
 Mercury -109267-03-28 07:26 J -38188262.36 -38188262.19 -38188262.01 0.0060 0.0027  
 Mercury -109267-06-24 08:38 J -38188174.31 -38188174.14 -38188173.94 0.0060 0.0020  
 Mercury -109267-09-20 10:19 J -38188086.26 -38188086.07 -38188085.87 0.0060 0.0012  
 Mercury -109267-12-17 11:45 J -38187998.20 -38187998.01 -38187997.81 0.0060 0.0004  
 Mercury -109266-03-15 13:26 J -38187910.14 -38187909.94 -38187909.75 0.0060 0.0004  
 Mercury -109266-06-11 14:38 J -38187822.08 -38187821.89 -38187821.69 0.0061 0.0011

Mercury -109266-09-07 16:04 J -38187734.01 -38187733.83 -38187733.64 0.0061 0.0019  
 Mercury -109266-12-04 17:16 J -38187645.94 -38187645.78 -38187645.59 0.0061 0.0027  
 Mercury -109265-03-01 18:43 J -38187557.86 -38187557.72 -38187557.54 0.0061 0.0035  
 Mercury -109265-05-28 20:24 J -38187469.78 -38187469.65 -38187469.50 0.0061 0.0042  
 Mercury -109265-08-24 21:36 J -38187381.69 -38187381.60 -38187381.47 0.0061 0.0050  
 Mercury -109265-11-20 23:02 J -38187293.58 -38187293.54 -38187293.46 0.0061 0.0058  
 Venus -109256-02-12 06:43 J -38184288.30 -38184288.22 -38184288.08 0.0064 0.0056  
 Venus -109256-09-25 11:31 J -38184063.22 -38184063.02 -38184062.78 0.0064 0.0016  
 Venus -109255-05-08 16:19 J -38183838.01 -38183837.82 -38183837.59 0.0064 0.0025  
 Mars -109255-07-14 21:21 J -38183770.89 -38183770.61 -38183770.30 0.0064 0.0015  
 Moon -109253-01-30 15:36 J -38183206.10 -38183205.85 -38183205.57 0.0065 0.0010  
 Earth -109253-01-30 18:14 J -38183206.01 -38183205.74 -38183205.47 0.0065 0.0007 \*  
 Mercury -109175-11-01 10:04 J -38154441.08 -38154441.08 -38154441.06 0.0085 0.0085  
 Mercury -109174-01-28 11:31 J -38154353.09 -38154353.02 -38154352.94 0.0085 0.0070  
 Mercury -109174-04-26 12:43 J -38154265.06 -38154264.97 -38154264.86 0.0084 0.0056  
 Mercury -109174-07-23 14:09 J -38154177.02 -38154176.91 -38154176.79 0.0084 0.0041  
 Mercury -109174-10-19 15:21 J -38154088.98 -38154088.86 -38154088.73 0.0084 0.0027  
 Mercury -109173-01-15 16:48 J -38154000.94 -38154000.80 -38154000.67 0.0084 0.0013  
 Mercury -109173-04-12 18:00 J -38153912.88 -38153912.75 -38153912.62 0.0084 0.0001  
 Mercury -109173-07-09 19:12 J -38153824.83 -38153824.70 -38153824.57 0.0084 0.0015  
 Mercury -109173-10-05 20:24 J -38153736.77 -38153736.65 -38153736.52 0.0084 0.0029  
 Mercury -109172-01-01 21:36 J -38153648.71 -38153648.60 -38153648.48 0.0084 0.0042  
 Mercury -109172-03-30 22:33 J -38153560.64 -38153560.56 -38153560.45 0.0083 0.0057  
 Mercury -109172-06-27 00:00 J -38153472.56 -38153472.50 -38153472.42 0.0083 0.0070  
 Mercury -109172-09-23 01:26 J -38153384.44 -38153384.44 -38153384.44 0.0083 0.0083  
 Venus -109167-01-06 05:16 J -38151818.43 -38151818.28 -38151818.10 0.0081 0.0053  
 Venus -109167-08-19 14:38 J -38151593.08 -38151592.89 -38151592.67 0.0080 0.0024  
 Moon -109166-07-30 06:14 J -38151248.43 -38151248.24 -38151248.02 0.0080 0.0043  
 Earth -109166-07-30 09:21 J -38151248.29 -38151248.11 -38151247.88 0.0080 0.0044 \*  
 Mercury -109021-08-15 11:31 J -38098270.09 -38098270.02 -38098269.91 0.0060 0.0053

Mercury	-109021-11-11 13:12 J	-38098182.07	-38098181.95	-38098181.81	0.0060	0.0046
Mercury	-109020-02-07 14:24 J	-38098094.03	-38098093.90	-38098093.73	0.0060	0.0038
Mercury	-109020-05-06 16:04 J	-38098005.99	-38098005.83	-38098005.65	0.0060	0.0031
Mercury	-109020-08-02 17:16 J	-38097917.94	-38097917.78	-38097917.58	0.0060	0.0024
Mercury	-109020-10-29 18:57 J	-38097829.89	-38097829.71	-38097829.51	0.0060	0.0016
Mercury	-109019-01-25 20:24 J	-38097741.84	-38097741.65	-38097741.45	0.0060	0.0008
Mercury	-109019-04-23 22:04 J	-38097653.78	-38097653.58	-38097653.39	0.0060	0.0001
Mercury	-109019-07-20 23:16 J	-38097565.72	-38097565.53	-38097565.33	0.0061	0.0007
Mercury	-109019-10-17 00:43 J	-38097477.65	-38097477.47	-38097477.27	0.0061	0.0015
Mercury	-109018-01-13 01:55 J	-38097389.58	-38097389.42	-38097389.22	0.0061	0.0023
Mercury	-109018-04-11 03:50 J	-38097301.51	-38097301.34	-38097301.17	0.0061	0.0030
Mercury	-109018-07-08 05:02 J	-38097213.43	-38097213.29	-38097213.13	0.0061	0.0038
Mercury	-109018-10-04 06:14 J	-38097125.35	-38097125.24	-38097125.09	0.0061	0.0046
Mercury	-109018-12-31 08:09 J	-38097037.25	-38097037.16	-38097037.06	0.0061	0.0053
Venus	-109009-06-05 01:12 J	-38093958.59	-38093958.45	-38093958.26	0.0064	0.0044
Venus	-109008-01-16 06:14 J	-38093733.47	-38093733.24	-38093733.01	0.0064	0.0004
Venus	-109008-08-29 10:19 J	-38093508.23	-38093508.07	-38093507.86	0.0064	0.0037
Moon	-109006-01-31 13:55 J	-38092988.11	-38092987.92	-38092987.68	0.0065	0.0037
Earth	-109006-01-31 15:36 J	-38092988.05	-38092987.85	-38092987.59	0.0065	0.0035 *
Moon	-109005-02-02 07:12 J	-38092621.39	-38092621.20	-38092620.99	0.0065	0.0045
Earth	-109005-02-02 07:12 J	-38092621.37	-38092621.20	-38092620.97	0.0065	0.0043 *

# 109TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 109th millennium BCE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
	TRANSIT							
	TIME							
Mercury	-108927-03-08 21:36 J	-38064096.63	-38064096.60	-38064096.53	0.0085	0.0078		
Mercury	-108927-06-04 23:16 J	-38064008.62	-38064008.53	-38064008.44	0.0085	0.0063		
Mercury	-108927-09-01 00:28 J	-38063920.58	-38063920.48	-38063920.37	0.0084	0.0049		
Mercury	-108927-11-28 01:55 J	-38063832.54	-38063832.42	-38063832.30	0.0084	0.0035		
Mercury	-108926-02-24 03:07 J	-38063744.50	-38063744.37	-38063744.24	0.0084	0.0020		
Mercury	-108926-05-23 04:19 J	-38063656.45	-38063656.32	-38063656.18	0.0084	0.0007		
Mercury	-108926-08-19 05:31 J	-38063568.40	-38063568.27	-38063568.13	0.0084	0.0008		
Mercury	-108926-11-15 06:43 J	-38063480.34	-38063480.22	-38063480.08	0.0084	0.0022		
Mercury	-108925-02-11 08:09 J	-38063392.28	-38063392.16	-38063392.04	0.0084	0.0035		
Mercury	-108925-05-09 09:21 J	-38063304.22	-38063304.11	-38063304.00	0.0083	0.0049		
Mercury	-108925-08-05 10:19 J	-38063216.14	-38063216.07	-38063215.97	0.0083	0.0063		
Mercury	-108925-11-01 11:31 J	-38063128.06	-38063128.02	-38063127.95	0.0083	0.0076		
Venus	-108920-04-29 00:43 J	-38061488.65	-38061488.47	-38061488.27	0.0081	0.0036		
Venus	-108920-12-10 09:50 J	-38061263.26	-38061263.09	-38061262.89	0.0080	0.0040		
Mars	-108919-03-29 15:36 J	-38061154.15	-38061153.85	-38061153.51	0.0080	0.0025		
Earth	-108918-08-02 08:52 J	-38060663.31	-38060663.13	-38060662.91	0.0079	0.0046		
Moon	-108918-08-02 11:45 J	-38060663.18	-38060663.01	-38060662.79	0.0079	0.0051	*	
Mercury	-108774-09-24 21:21 J	-38008013.68	-38008013.61	-38008013.50	0.0060	0.0053		
Mercury	-108774-12-21 23:16 J	-38007925.66	-38007925.53	-38007925.41	0.0060	0.0046		
Mercury	-108773-03-19 00:14 J	-38007837.62	-38007837.49	-38007837.32	0.0060	0.0038		
Mercury	-108773-06-15 01:26 J	-38007749.58	-38007749.44	-38007749.25	0.0060	0.0032		
Mercury	-108773-09-11 03:07 J	-38007661.54	-38007661.37	-38007661.17	0.0060	0.0024		
Mercury	-108773-12-08 04:48 J	-38007573.48	-38007573.30	-38007573.11	0.0060	0.0016		
Mercury	-108772-03-06 06:14 J	-38007485.43	-38007485.24	-38007485.04	0.0060	0.0008		
Mercury	-108772-06-02 07:40 J	-38007397.37	-38007397.18	-38007396.98	0.0061	0.0002		
Mercury	-108772-08-29 09:07 J	-38007309.31	-38007309.12	-38007308.92	0.0061	0.0007		

Mercury -108772-11-25 10:33 J -38007221.25 -38007221.06 -38007220.87 0.0061 0.0015

Mercury -108771-02-21 11:45 J -38007133.18 -38007133.01 -38007132.81 0.0061 0.0023

Mercury -108771-05-20 13:26 J -38007045.10 -38007044.94 -38007044.76 0.0061 0.0030

Mercury -108771-08-16 14:38 J -38006957.03 -38006956.89 -38006956.72 0.0061 0.0038

Mercury -108771-11-12 15:50 J -38006868.94 -38006868.84 -38006868.68 0.0061 0.0046

Mercury -108770-02-08 17:45 J -38006780.84 -38006780.76 -38006780.66 0.0061 0.0053

Venus -108762-02-13 17:16 J -38003853.78 -38003853.78 -38003853.74 0.0064 0.0063

Venus -108762-09-26 21:50 J -38003628.79 -38003628.59 -38003628.36 0.0064 0.0024

Venus -108761-05-09 02:38 J -38003403.60 -38003403.39 -38003403.16 0.0064 0.0017

Venus -108761-12-20 07:12 J -38003178.28 -38003178.20 -38003178.08 0.0064 0.0057

Mars -108760-03-14 20:24 J -38003093.92 -38003093.65 -38003093.36 0.0064 0.0023

Moon -108759-02-01 17:02 J -38002769.93 -38002769.79 -38002769.59 0.0065 0.0049

Earth -108759-02-01 18:14 J -38002769.87 -38002769.74 -38002769.54 0.0065 0.0052 \*

Moon -108758-02-03 09:07 J -38002403.36 -38002403.12 -38002402.84 0.0065 0.0023

Earth -108758-02-03 09:50 J -38002403.31 -38002403.09 -38002402.81 0.0065 0.0026 \*

Mercury -108680-04-17 09:50 J -37973840.14 -37973840.09 -37973840.02 0.0085 0.0074

Mercury -108680-07-14 11:02 J -37973752.12 -37973752.04 -37973751.93 0.0085 0.0060

Mercury -108680-10-10 12:28 J -37973664.09 -37973663.98 -37973663.86 0.0084 0.0045

Mercury -108679-01-06 13:40 J -37973576.05 -37973575.93 -37973575.80 0.0084 0.0031

Mercury -108679-04-04 15:07 J -37973488.00 -37973487.87 -37973487.74 0.0084 0.0017

Mercury -108679-07-01 16:19 J -37973399.95 -37973399.82 -37973399.68 0.0084 0.0004

Mercury -108679-09-27 17:31 J -37973311.90 -37973311.77 -37973311.63 0.0084 0.0012

Mercury -108679-12-24 18:57 J -37973223.84 -37973223.71 -37973223.59 0.0084 0.0025

Mercury -108678-03-22 19:55 J -37973135.78 -37973135.67 -37973135.54 0.0084 0.0039

Mercury -108678-06-18 21:07 J -37973047.71 -37973047.62 -37973047.51 0.0083 0.0053

Mercury -108678-09-14 22:19 J -37972959.64 -37972959.57 -37972959.48 0.0083 0.0066

Mercury -108678-12-11 23:45 J -37972871.54 -37972871.51 -37972871.47 0.0083 0.0079

Venus -108673-01-07 15:21 J -37971383.93 -37971383.86 -37971383.74 0.0081 0.0072

Venus -108673-08-20 01:26 J -37971158.66 -37971158.44 -37971158.23 0.0081 0.0005

Venus -108672-04-02 10:19 J -37970933.07 -37970933.07 -37970933.04 0.0080 0.0080

Earth -108671-08-03 15:50 J -37970445.06 -37970444.84 -37970444.60 0.0080 0.0030  
 Moon -108671-08-03 18:28 J -37970444.95 -37970444.73 -37970444.48 0.0080 0.0029 \*  
 Mercury -108527-08-07 06:43 J -37917845.26 -37917845.22 -37917845.12 0.0060 0.0056  
 Mercury -108527-11-03 08:38 J -37917757.25 -37917757.14 -37917757.02 0.0060 0.0048  
 Mercury -108526-01-30 09:50 J -37917669.21 -37917669.09 -37917668.93 0.0060 0.0041  
 Mercury -108526-04-28 11:31 J -37917581.17 -37917581.02 -37917580.85 0.0060 0.0034  
 Mercury -108526-07-25 12:43 J -37917493.13 -37917492.97 -37917492.77 0.0060 0.0027  
 Mercury -108526-10-21 14:24 J -37917405.08 -37917404.90 -37917404.70 0.0060 0.0019  
 Mercury -108525-01-17 15:50 J -37917317.02 -37917316.84 -37917316.64 0.0060 0.0011  
 Mercury -108525-04-14 17:31 J -37917228.97 -37917228.77 -37917228.57 0.0060 0.0004  
 Mercury -108525-07-11 18:57 J -37917140.90 -37917140.71 -37917140.51 0.0061 0.0004  
 Mercury -108525-10-07 20:24 J -37917052.84 -37917052.65 -37917052.46 0.0061 0.0012  
 Mercury -108524-01-03 21:36 J -37916964.77 -37916964.60 -37916964.40 0.0061 0.0020  
 Mercury -108524-04-01 23:02 J -37916876.70 -37916876.54 -37916876.35 0.0061 0.0027  
 Mercury -108524-06-29 00:28 J -37916788.63 -37916788.48 -37916788.31 0.0061 0.0035  
 Mercury -108524-09-25 01:40 J -37916700.54 -37916700.43 -37916700.27 0.0061 0.0043  
 Mercury -108524-12-22 03:21 J -37916612.45 -37916612.36 -37916612.23 0.0061 0.0050  
 Mercury -108523-03-20 04:48 J -37916524.34 -37916524.30 -37916524.22 0.0061 0.0058  
 Venus -108515-06-06 17:16 J -37913523.97 -37913523.78 -37913523.59 0.0064 0.0034  
 Venus -108514-01-17 21:50 J -37913298.82 -37913298.59 -37913298.36 0.0064 0.0006  
 Mars -108514-08-04 08:52 J -37913100.34 -37913100.13 -37913099.91 0.0064 0.0045  
 Venus -108514-08-31 02:09 J -37913073.55 -37913073.41 -37913073.24 0.0064 0.0046  
 Moon -108512-02-03 00:57 J -37912551.55 -37912551.46 -37912551.31 0.0065 0.0058  
 Earth -108512-02-03 02:09 J -37912551.51 -37912551.41 -37912551.27 0.0065 0.0058 \*  
 Moon -108511-02-04 16:33 J -37912185.06 -37912184.81 -37912184.52 0.0065 0.0018  
 Earth -108511-02-04 17:45 J -37912185.00 -37912184.76 -37912184.48 0.0065 0.0019 \*  
 Mercury -108433-02-28 21:21 J -37883671.65 -37883671.61 -37883671.56 0.0085 0.0079  
 Mercury -108433-05-26 22:48 J -37883583.63 -37883583.55 -37883583.46 0.0085 0.0065  
 Mercury -108433-08-23 00:00 J -37883495.60 -37883495.50 -37883495.39 0.0084 0.0051  
 Mercury -108433-11-19 01:12 J -37883407.56 -37883407.45 -37883407.32 0.0084 0.0037

Mercury -108432-02-15 02:38 J -37883319.52 -37883319.39 -37883319.26 0.0084 0.0022  
 Mercury -108432-05-14 03:50 J -37883231.47 -37883231.34 -37883231.21 0.0084 0.0008  
 Mercury -108432-08-10 05:02 J -37883143.42 -37883143.29 -37883143.15 0.0084 0.0006  
 Mercury -108432-11-06 06:14 J -37883055.36 -37883055.24 -37883055.11 0.0084 0.0020  
 Mercury -108431-02-02 07:40 J -37882967.30 -37882967.18 -37882967.06 0.0084 0.0033  
 Mercury -108431-05-01 08:38 J -37882879.24 -37882879.14 -37882879.02 0.0084 0.0047  
 Mercury -108431-07-28 09:50 J -37882791.17 -37882791.09 -37882790.99 0.0083 0.0061  
 Mercury -108431-10-24 11:02 J -37882703.09 -37882703.04 -37882702.97 0.0083 0.0074  
 Venus -108426-04-30 18:14 J -37881053.93 -37881053.74 -37881053.52 0.0081 0.0021  
 Venus -108426-12-12 03:21 J -37880828.49 -37880828.36 -37880828.18 0.0080 0.0056  
 Earth -108424-08-05 02:24 J -37880226.64 -37880226.40 -37880226.17 0.0080 0.0024  
 Moon -108424-08-05 04:48 J -37880226.53 -37880226.30 -37880226.04 0.0080 0.0022 \*  
 Mercury -108280-06-19 17:16 J -37827676.83 -37827676.78 -37827676.69 0.0060 0.0056  
 Mercury -108280-09-15 18:57 J -37827588.81 -37827588.71 -37827588.58 0.0060 0.0049  
 Mercury -108280-12-12 20:09 J -37827500.78 -37827500.66 -37827500.49 0.0060 0.0042  
 Mercury -108279-03-10 22:04 J -37827412.74 -37827412.58 -37827412.41 0.0060 0.0034  
 Mercury -108279-06-06 23:16 J -37827324.69 -37827324.53 -37827324.34 0.0060 0.0027  
 Mercury -108279-09-03 00:57 J -37827236.64 -37827236.46 -37827236.27 0.0060 0.0019  
 Mercury -108279-11-30 02:24 J -37827148.59 -37827148.40 -37827148.20 0.0060 0.0011  
 Mercury -108278-02-26 04:04 J -37827060.53 -37827060.33 -37827060.14 0.0061 0.0004  
 Mercury -108278-05-25 05:31 J -37826972.47 -37826972.27 -37826972.08 0.0061 0.0004  
 Mercury -108278-08-21 06:43 J -37826884.40 -37826884.22 -37826884.02 0.0061 0.0012  
 Mercury -108278-11-17 08:09 J -37826796.33 -37826796.16 -37826795.96 0.0061 0.0020  
 Mercury -108277-02-13 09:35 J -37826708.26 -37826708.10 -37826707.91 0.0061 0.0027  
 Mercury -108277-05-11 11:02 J -37826620.19 -37826620.04 -37826619.87 0.0061 0.0035  
 Mercury -108277-08-07 12:43 J -37826532.10 -37826531.97 -37826531.82 0.0061 0.0042  
 Mercury -108277-11-03 13:55 J -37826444.01 -37826443.92 -37826443.79 0.0061 0.0050  
 Mercury -108276-01-30 15:21 J -37826355.90 -37826355.86 -37826355.78 0.0061 0.0058  
 Venus -108268-02-14 13:11 J -37823419.11 -37823418.95 -37823418.75 0.0064 0.0039  
 Venus -108268-09-27 18:14 J -37823193.97 -37823193.74 -37823193.51 0.0064 0.0001

Venus -108267-05-10 22:48 J -37822968.72 -37822968.55 -37822968.37 0.0064 0.0041  
 Moon -108265-02-05 10:48 J -37822333.13 -37822333.05 -37822332.93 0.0065 0.0060  
 Earth -108265-02-05 12:14 J -37822333.09 -37822332.99 -37822332.84 0.0065 0.0057 \*  
 Moon -108264-02-06 04:04 J -37821966.58 -37821966.33 -37821966.06 0.0065 0.0023  
 Earth -108264-02-06 04:19 J -37821966.57 -37821966.32 -37821966.05 0.0065 0.0020 \*  
 Mercury -108186-01-11 10:04 J -37793503.13 -37793503.08 -37793503.02 0.0085 0.0076  
 Mercury -108186-04-09 11:16 J -37793415.11 -37793415.03 -37793414.93 0.0085 0.0062  
 Mercury -108186-07-06 12:43 J -37793327.08 -37793326.97 -37793326.86 0.0084 0.0047  
 Mercury -108186-10-02 13:55 J -37793239.04 -37793238.92 -37793238.79 0.0084 0.0033  
 Mercury -108186-12-29 15:21 J -37793150.99 -37793150.86 -37793150.73 0.0084 0.0019  
 Mercury -108185-03-26 16:33 J -37793062.94 -37793062.81 -37793062.68 0.0084 0.0005  
 Mercury -108185-06-22 17:45 J -37792974.89 -37792974.76 -37792974.63 0.0084 0.0009  
 Mercury -108185-09-18 18:57 J -37792886.83 -37792886.71 -37792886.58 0.0084 0.0022  
 Mercury -108185-12-15 20:09 J -37792798.77 -37792798.66 -37792798.53 0.0084 0.0036  
 Mercury -108184-03-13 21:21 J -37792710.71 -37792710.61 -37792710.50 0.0084 0.0050  
 Mercury -108184-06-09 22:33 J -37792622.64 -37792622.56 -37792622.47 0.0083 0.0063  
 Mercury -108184-09-06 00:00 J -37792534.55 -37792534.50 -37792534.45 0.0083 0.0077  
 Venus -108179-01-08 15:07 J -37790949.05 -37790948.87 -37790948.65 0.0081 0.0028  
 Venus -108179-08-22 00:28 J -37790723.63 -37790723.48 -37790723.29 0.0081 0.0049  
 Earth -108177-08-06 18:57 J -37790007.93 -37790007.71 -37790007.49 0.0079 0.0038  
 Moon -108177-08-06 22:04 J -37790007.79 -37790007.58 -37790007.36 0.0079 0.0042 \*  
 Mercury -108033-02-04 03:35 J -37737596.36 -37737596.35 -37737596.30 0.0060 0.0059  
 Mercury -108033-05-02 04:48 J -37737508.37 -37737508.30 -37737508.17 0.0060 0.0053  
 Mercury -108033-07-29 06:43 J -37737420.34 -37737420.22 -37737420.08 0.0060 0.0044  
 Mercury -108033-10-25 07:55 J -37737332.30 -37737332.17 -37737331.99 0.0060 0.0037  
 Mercury -108032-01-21 09:35 J -37737244.26 -37737244.10 -37737243.92 0.0060 0.0030  
 Mercury -108032-04-19 11:02 J -37737156.21 -37737156.04 -37737155.84 0.0060 0.0022  
 Mercury -108032-07-16 12:43 J -37737068.16 -37737067.97 -37737067.78 0.0060 0.0014  
 Mercury -108032-10-12 14:09 J -37736980.10 -37736979.91 -37736979.71 0.0061 0.0007  
 Mercury -108031-01-08 15:35 J -37736892.04 -37736891.85 -37736891.65 0.0061 0.0002



Mercury	-108031-04-06 17:02 J	-37736803.98	-37736803.79	-37736803.59	0.0061	0.0009
Mercury	-108031-07-03 18:28 J	-37736715.91	-37736715.73	-37736715.53	0.0061	0.0016
Mercury	-108031-09-29 19:55 J	-37736627.84	-37736627.67	-37736627.48	0.0061	0.0024
Mercury	-108031-12-26 21:35 J	-37736539.77	-37736539.60	-37736539.43	0.0061	0.0031
Mercury	-108030-03-24 22:48 J	-37736451.69	-37736451.55	-37736451.39	0.0061	0.0039
Mercury	-108030-06-21 00:00 J	-37736363.60	-37736363.50	-37736363.35	0.0061	0.0047
Mercury	-108030-09-17 01:55 J	-37736275.50	-37736275.42	-37736275.33	0.0061	0.0055
Venus	-108022-10-26 12:14 J	-37733314.16	-37733313.99	-37733313.77	0.0064	0.0035
Venus	-108021-06-07 17:16 J	-37733089.00	-37733088.78	-37733088.54	0.0064	0.0006
Venus	-108020-01-18 22:04 J	-37732863.74	-37732863.58	-37732863.42	0.0064	0.0045
Moon	-108018-02-07 00:57 J	-37732114.63	-37732114.46	-37732114.24	0.0065	0.0044
Earth	-108018-02-07 03:21 J	-37732114.53	-37732114.36	-37732114.15	0.0065	0.0046 *
Earth	-108017-02-08 19:40 J	-37731747.91	-37731747.68	-37731747.44	0.0065	0.0032
Moon	-108017-02-08 19:55 J	-37731747.89	-37731747.67	-37731747.39	0.0065	0.0030 *

# 108TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 108th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury	-107940-08-27 22:19 J	-37703422.60	-37703422.57	-37703422.54	0.0085	0.0082
Mercury	-107940-11-23 23:31 J	-37703334.59	-37703334.52	-37703334.44	0.0085	0.0068

Mercury -107939-02-20 00:43 J -37703246.56 -37703246.47 -37703246.36 0.0084 0.0054  
 Mercury -107939-05-19 02:09 J -37703158.52 -37703158.41 -37703158.29 0.0084 0.0040  
 Mercury -107939-08-15 03:21 J -37703070.48 -37703070.36 -37703070.23 0.0084 0.0026  
 Mercury -107939-11-11 04:33 J -37702982.43 -37702982.31 -37702982.17 0.0084 0.0012  
 Mercury -107938-02-07 06:00 J -37702894.38 -37702894.25 -37702894.12 0.0084 0.0002  
 Mercury -107938-05-06 07:11 J -37702806.33 -37702806.20 -37702806.07 0.0084 0.0016  
 Mercury -107938-08-02 08:24 J -37702718.27 -37702718.15 -37702718.02 0.0084 0.0030  
 Mercury -107938-10-29 09:21 J -37702630.21 -37702630.11 -37702629.98 0.0084 0.0044  
 Mercury -107937-01-25 10:48 J -37702542.14 -37702542.05 -37702541.95 0.0083 0.0057  
 Mercury -107937-04-22 11:45 J -37702454.06 -37702454.01 -37702453.92 0.0083 0.0071  
 Venus -107933-09-18 14:24 J -37700844.09 -37700843.90 -37700843.69 0.0081 0.0026  
 Venus -107932-05-01 23:45 J -37700618.66 -37700618.51 -37700618.33 0.0081 0.0051  
 Mars -107932-09-05 21:21 J -37700491.93 -37700491.61 -37700491.27 0.0080 0.0013  
 Moon -107931-08-07 09:50 J -37700156.19 -37700156.09 -37700155.95 0.0080 0.0070  
 Earth -107931-08-07 13:26 J -37700156.04 -37700155.94 -37700155.81 0.0080 0.0070 \*  
 Earth -107930-08-09 13:55 J -37699789.05 -37699788.92 -37699788.74 0.0079 0.0062  
 Moon -107930-08-09 17:02 J -37699788.92 -37699788.79 -37699788.60 0.0079 0.0061 \*  
 Mercury -107787-09-20 14:52 J -37647515.88 -37647515.88 -37647515.86 0.0060 0.0060  
 Mercury -107787-12-17 16:19 J -37647427.90 -37647427.82 -37647427.72 0.0060 0.0053  
 Mercury -107786-03-15 17:31 J -37647339.88 -37647339.77 -37647339.62 0.0060 0.0045  
 Mercury -107786-06-11 19:26 J -37647251.84 -37647251.69 -37647251.54 0.0060 0.0038  
 Mercury -107786-09-07 20:24 J -37647163.80 -37647163.65 -37647163.46 0.0060 0.0031  
 Mercury -107786-12-04 22:19 J -37647075.75 -37647075.57 -37647075.39 0.0060 0.0023  
 Mercury -107785-03-01 23:31 J -37646987.70 -37646987.52 -37646987.32 0.0060 0.0016  
 Mercury -107785-05-29 01:11 J -37646899.64 -37646899.45 -37646899.25 0.0061 0.0008  
 Mercury -107785-08-25 02:38 J -37646811.58 -37646811.39 -37646811.19 0.0061 0.0001  
 Mercury -107785-11-21 04:04 J -37646723.52 -37646723.33 -37646723.13 0.0061 0.0008  
 Mercury -107784-02-17 05:31 J -37646635.45 -37646635.27 -37646635.07 0.0061 0.0015  
 Mercury -107784-05-16 06:57 J -37646547.38 -37646547.21 -37646547.02 0.0061 0.0023  
 Mercury -107784-08-12 08:09 J -37646459.31 -37646459.16 -37646458.97 0.0061 0.0031

Mercury -107784-11-08 09:50 J -37646371.23 -37646371.09 -37646370.93 0.0061 0.0038  
 Mercury -107783-02-04 11:02 J -37646283.14 -37646283.04 -37646282.89 0.0061 0.0046  
 Mercury -107783-05-03 12:28 J -37646195.05 -37646194.98 -37646194.86 0.0061 0.0054  
 Venus -107775-07-06 13:40 J -37643209.14 -37643208.93 -37643208.72 0.0064 0.0025  
 Venus -107774-02-16 18:00 J -37642983.96 -37642983.75 -37642983.52 0.0064 0.0015  
 Venus -107774-09-29 22:19 J -37642758.66 -37642758.57 -37642758.43 0.0064 0.0055  
 Mars -107773-08-25 23:31 J -37642427.69 -37642427.52 -37642427.27 0.0064 0.0047  
 Moon -107771-02-08 18:43 J -37641895.93 -37641895.72 -37641895.46 0.0065 0.0028  
 Earth -107771-02-08 21:07 J -37641895.85 -37641895.62 -37641895.36 0.0065 0.0028 \*  
 Earth -107770-02-10 12:28 J -37641529.11 -37641528.98 -37641528.77 0.0065 0.0051  
 Moon -107770-02-10 14:24 J -37641529.09 -37641528.90 -37641528.72 0.0065 0.0049 \*  
 Mercury -107693-04-13 11:16 J -37613342.06 -37613342.03 -37613341.99 0.0085 0.0081  
 Mercury -107693-07-10 12:28 J -37613254.05 -37613253.98 -37613253.89 0.0085 0.0067  
 Mercury -107693-10-06 13:55 J -37613166.02 -37613165.92 -37613165.81 0.0085 0.0053  
 Mercury -107692-01-02 15:21 J -37613077.98 -37613077.86 -37613077.75 0.0084 0.0039  
 Mercury -107692-03-31 16:33 J -37612989.94 -37612989.81 -37612989.68 0.0084 0.0025  
 Mercury -107692-06-27 17:45 J -37612901.89 -37612901.76 -37612901.63 0.0084 0.0011  
 Mercury -107692-09-23 18:57 J -37612813.84 -37612813.71 -37612813.57 0.0084 0.0004  
 Mercury -107692-12-20 20:09 J -37612725.78 -37612725.66 -37612725.52 0.0084 0.0017  
 Mercury -107691-03-18 21:21 J -37612637.73 -37612637.61 -37612637.48 0.0084 0.0031  
 Mercury -107691-06-14 22:48 J -37612549.66 -37612549.55 -37612549.44 0.0084 0.0044  
 Mercury -107691-09-10 23:45 J -37612461.59 -37612461.51 -37612461.40 0.0083 0.0058  
 Mercury -107691-12-08 00:57 J -37612373.52 -37612373.46 -37612373.38 0.0083 0.0071  
 Venus -107686-05-30 17:16 J -37610738.99 -37610738.78 -37610738.56 0.0081 0.0008  
 Venus -107685-01-11 02:09 J -37610513.50 -37610513.41 -37610513.27 0.0081 0.0069  
 Mars -107685-01-25 21:21 J -37610498.72 -37610498.61 -37610498.45 0.0081 0.0074  
 Moon -107684-08-09 11:31 J -37609937.26 -37609937.02 -37609936.79 0.0080 0.0025  
 Earth -107684-08-09 14:38 J -37609937.11 -37609936.89 -37609936.65 0.0080 0.0029 \*  
 Mercury -107540-05-07 03:07 J -37557435.42 -37557435.37 -37557435.28 0.0060 0.0056  
 Mercury -107540-08-03 04:19 J -37557347.40 -37557347.32 -37557347.18 0.0060 0.0050

Mercury -107540-10-30 06:14 J -37557259.37 -37557259.24 -37557259.09 0.0060 0.0041

Mercury -107539-01-26 07:26 J -37557171.33 -37557171.19 -37557171.01 0.0060 0.0035

Mercury -107539-04-24 09:07 J -37557083.29 -37557083.12 -37557082.93 0.0060 0.0027

Mercury -107539-07-21 10:33 J -37556995.24 -37556995.06 -37556994.86 0.0060 0.0019

Mercury -107539-10-17 12:14 J -37556907.18 -37556906.99 -37556906.80 0.0061 0.0012

Mercury -107538-01-13 13:40 J -37556819.12 -37556818.93 -37556818.73 0.0061 0.0004

Mercury -107538-04-11 15:07 J -37556731.06 -37556730.87 -37556730.67 0.0061 0.0004

Mercury -107538-07-08 16:33 J -37556643.00 -37556642.81 -37556642.61 0.0061 0.0011

Mercury -107538-10-04 17:45 J -37556554.93 -37556554.76 -37556554.56 0.0061 0.0019

Mercury -107538-12-31 19:11 J -37556466.86 -37556466.70 -37556466.51 0.0061 0.0027

Mercury -107537-03-28 20:52 J -37556378.78 -37556378.63 -37556378.46 0.0061 0.0034

Mercury -107537-06-24 22:04 J -37556290.70 -37556290.58 -37556290.42 0.0061 0.0042

Mercury -107537-09-20 23:16 J -37556202.61 -37556202.53 -37556202.39 0.0061 0.0050

Mercury -107537-12-18 01:11 J -37556114.50 -37556114.45 -37556114.37 0.0061 0.0057

Venus -107529-08-03 12:14 J -37553329.13 -37553328.99 -37553328.81 0.0064 0.0046

Venus -107528-03-16 17:02 J -37553104.01 -37553103.79 -37553103.55 0.0064 0.0007

Venus -107528-10-27 21:21 J -37552878.78 -37552878.61 -37552878.39 0.0064 0.0034

Mars -107526-01-16 10:33 J -37552433.31 -37552433.06 -37552432.78 0.0064 0.0031

Moon -107524-02-10 17:31 J -37551677.03 -37551676.77 -37551676.50 0.0065 0.0002

Earth -107524-02-10 19:55 J -37551676.94 -37551676.67 -37551676.40 0.0065 0.0001 \*

Mercury -107447-11-29 00:57 J -37523261.50 -37523261.46 -37523261.38 0.0085 0.0075

Mercury -107446-02-25 02:24 J -37523173.48 -37523173.40 -37523173.30 0.0085 0.0060

Mercury -107446-05-24 03:35 J -37523085.45 -37523085.35 -37523085.23 0.0084 0.0047

Mercury -107446-08-20 05:02 J -37522997.41 -37522997.29 -37522997.16 0.0084 0.0032

Mercury -107446-11-16 06:28 J -37522909.36 -37522909.23 -37522909.10 0.0084 0.0018

Mercury -107445-02-12 07:40 J -37522821.31 -37522821.18 -37522821.05 0.0084 0.0004

Mercury -107445-05-10 08:52 J -37522733.26 -37522733.13 -37522732.99 0.0084 0.0010

Mercury -107445-08-06 10:04 J -37522645.20 -37522645.08 -37522644.95 0.0084 0.0023

Mercury -107445-11-02 11:16 J -37522557.14 -37522557.03 -37522556.90 0.0084 0.0037

Mercury -107444-01-29 12:28 J -37522469.08 -37522468.98 -37522468.87 0.0084 0.0051

Mercury -107444-04-27 13:55 J -37522381.00 -37522380.92 -37522380.84 0.0083 0.0064

Mercury -107444-07-24 14:52 J -37522292.92 -37522292.88 -37522292.82 0.0083 0.0077

Venus -107440-06-27 12:57 J -37520859.10 -37520858.96 -37520858.79 0.0081 0.0054

Venus -107439-02-07 22:48 J -37520633.75 -37520633.55 -37520633.34 0.0081 0.0022

Moon -107437-08-11 16:48 J -37519718.03 -37519717.80 -37519717.55 0.0079 0.0020

Earth -107437-08-11 20:24 J -37519717.89 -37519717.65 -37519717.41 0.0079 0.0024 \*

Mercury -107294-09-25 14:52 J -37467442.93 -37467442.88 -37467442.82 0.0060 0.0058

Mercury -107294-12-22 16:04 J -37467354.92 -37467354.83 -37467354.71 0.0060 0.0050

Mercury -107293-03-19 17:16 J -37467266.89 -37467266.78 -37467266.62 0.0060 0.0044

Mercury -107293-06-15 19:11 J -37467178.85 -37467178.70 -37467178.53 0.0060 0.0036

Mercury -107293-09-11 20:24 J -37467090.80 -37467090.65 -37467090.46 0.0060 0.0029

Mercury -107293-12-08 22:04 J -37467002.75 -37467002.58 -37467002.39 0.0060 0.0021

Mercury -107292-03-06 23:31 J -37466914.70 -37466914.52 -37466914.32 0.0061 0.0013

Mercury -107292-06-03 01:11 J -37466826.64 -37466826.45 -37466826.25 0.0061 0.0006

Mercury -107292-08-30 02:38 J -37466738.58 -37466738.39 -37466738.19 0.0061 0.0002

Mercury -107292-11-26 04:04 J -37466650.52 -37466650.33 -37466650.13 0.0061 0.0010

Mercury -107291-02-22 05:31 J -37466562.45 -37466562.27 -37466562.08 0.0061 0.0017

Mercury -107291-05-21 06:57 J -37466474.38 -37466474.21 -37466474.02 0.0061 0.0025

Mercury -107291-08-17 08:09 J -37466386.31 -37466386.16 -37466385.98 0.0061 0.0033

Mercury -107291-11-13 09:50 J -37466298.22 -37466298.09 -37466297.93 0.0061 0.0040

Mercury -107290-02-09 11:02 J -37466210.14 -37466210.04 -37466209.90 0.0061 0.0048

Mercury -107290-05-08 12:28 J -37466122.03 -37466121.98 -37466121.88 0.0061 0.0056

Venus -107283-09-01 12:28 J -37463449.01 -37463448.98 -37463448.91 0.0063 0.0062

Venus -107282-04-14 17:16 J -37463223.99 -37463223.78 -37463223.56 0.0064 0.0023

Venus -107282-11-25 22:04 J -37462998.79 -37462998.58 -37462998.35 0.0064 0.0017

Venus -107281-07-08 02:38 J -37462773.47 -37462773.39 -37462773.27 0.0064 0.0057

Mars -107280-06-08 00:14 J -37462438.74 -37462438.49 -37462438.19 0.0064 0.0025

Earth -107278-02-12 05:02 J -37461824.47 -37461824.29 -37461824.06 0.0065 0.0042

Moon -107278-02-12 08:52 J -37461824.30 -37461824.13 -37461823.91 0.0065 0.0045 \*

Moon -107277-02-13 18:14 J -37461457.92 -37461457.74 -37461457.50 0.0065 0.0039

Earth -107277-02-13 21:07 J -37461457.82 -37461457.62 -37461457.37 0.0065 0.0037 \*  
 Mercury -107200-04-18 14:52 J -37433268.93 -37433268.88 -37433268.81 0.0085 0.0075  
 Mercury -107200-07-15 16:19 J -37433180.91 -37433180.82 -37433180.73 0.0085 0.0061  
 Mercury -107200-10-11 17:31 J -37433092.88 -37433092.77 -37433092.66 0.0084 0.0047  
 Mercury -107199-01-07 18:43 J -37433004.84 -37433004.72 -37433004.59 0.0084 0.0033  
 Mercury -107199-04-05 19:55 J -37432916.79 -37432916.67 -37432916.53 0.0084 0.0020  
 Mercury -107199-07-02 21:21 J -37432828.74 -37432828.61 -37432828.48 0.0084 0.0005  
 Mercury -107199-09-28 22:33 J -37432740.69 -37432740.56 -37432740.43 0.0084 0.0009  
 Mercury -107199-12-25 23:45 J -37432652.63 -37432652.51 -37432652.38 0.0084 0.0022  
 Mercury -107198-03-24 00:57 J -37432564.57 -37432564.46 -37432564.33 0.0084 0.0036  
 Mercury -107198-06-20 02:09 J -37432476.51 -37432476.41 -37432476.30 0.0084 0.0050  
 Mercury -107198-09-16 03:35 J -37432388.44 -37432388.35 -37432388.27 0.0083 0.0063  
 Mercury -107198-12-13 04:33 J -37432300.35 -37432300.31 -37432300.25 0.0083 0.0076  
 Venus -107193-03-07 21:35 J -37430753.81 -37430753.60 -37430753.39 0.0081 0.0009  
 Venus -107193-10-19 06:28 J -37430528.32 -37430528.23 -37430528.08 0.0081 0.0067  
 Earth -107191-08-13 05:31 J -37429865.47 -37429865.27 -37429865.03 0.0080 0.0039  
 Moon -107191-08-13 06:57 J -37429865.41 -37429865.21 -37429865.00 0.0080 0.0040 \*  
 Mercury -107047-02-13 03:07 J -37377450.42 -37377450.37 -37377450.26 0.0060 0.0055  
 Mercury -107047-05-12 05:02 J -37377362.40 -37377362.29 -37377362.16 0.0060 0.0048  
 Mercury -107047-08-08 06:14 J -37377274.36 -37377274.24 -37377274.07 0.0060 0.0041  
 Mercury -107047-11-04 07:55 J -37377186.32 -37377186.17 -37377185.99 0.0060 0.0033  
 Mercury -107046-01-31 09:21 J -37377098.27 -37377098.11 -37377097.92 0.0060 0.0026  
 Mercury -107046-04-29 11:02 J -37377010.22 -37377010.04 -37377009.85 0.0060 0.0018  
 Mercury -107046-07-26 12:28 J -37376922.17 -37376921.98 -37376921.78 0.0061 0.0010  
 Mercury -107046-10-22 14:09 J -37376834.11 -37376833.91 -37376833.72 0.0061 0.0003  
 Mercury -107045-01-18 15:35 J -37376746.05 -37376745.85 -37376745.65 0.0061 0.0005  
 Mercury -107045-04-15 16:48 J -37376657.98 -37376657.80 -37376657.60 0.0061 0.0013  
 Mercury -107045-07-12 18:28 J -37376569.91 -37376569.73 -37376569.54 0.0061 0.0020  
 Mercury -107045-10-08 19:40 J -37376481.84 -37376481.68 -37376481.49 0.0061 0.0028  
 Mercury -107044-01-04 21:35 J -37376393.76 -37376393.60 -37376393.44 0.0061 0.0035

Mercury -107044-04-02 22:48 J -37376305.68 -37376305.55 -37376305.40 0.0061 0.0043

Mercury -107044-06-30 00:00 J -37376217.58 -37376217.50 -37376217.37 0.0061 0.0051

Mercury -107044-09-26 01:55 J -37376129.47 -37376129.42 -37376129.36 0.0061 0.0059

Venus -107036-05-12 20:24 J -37373343.85 -37373343.65 -37373343.44 0.0064 0.0030

Venus -107036-12-24 00:57 J -37373118.67 -37373118.46 -37373118.22 0.0064 0.0010

Venus -107035-08-06 06:00 J -37372893.40 -37372893.25 -37372893.11 0.0064 0.0049

Mars -107034-10-29 21:21 J -37372443.84 -37372443.61 -37372443.33 0.0064 0.0034

Earth -107031-02-14 11:31 J -37371605.29 -37371605.02 -37371604.74 0.0065 0.0004

Moon -107031-02-14 15:35 J -37371605.12 -37371604.85 -37371604.58 0.0065 0.0004 \*

# 107TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 107th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-106954-06-11 04:04 J	-37343364.34	-37343364.33	-37343364.30	0.0085	0.0084		
Mercury	-106954-09-07 05:16 J	-37343276.34	-37343276.28	-37343276.19	0.0085	0.0070		
Mercury	-106954-12-04 06:43 J	-37343188.31	-37343188.22	-37343188.11	0.0085	0.0055		
Mercury	-106953-03-01 07:55 J	-37343100.28	-37343100.17	-37343100.05	0.0084	0.0042		
Mercury	-106953-05-28 09:21 J	-37343012.23	-37343012.11	-37343011.98	0.0084	0.0027		
Mercury	-106953-08-24 10:33 J	-37342924.19	-37342924.06	-37342923.93	0.0084	0.0014		
Mercury	-106953-11-20 11:45 J	-37342836.14	-37342836.01	-37342835.87	0.0084	0.0003		

Mercury -106952-02-16 13:11 J -37342748.08 -37342747.95 -37342747.82 0.0084 0.0014

Mercury -106952-05-15 14:09 J -37342660.03 -37342659.91 -37342659.78 0.0084 0.0028

Mercury -106952-08-11 15:35 J -37342571.97 -37342571.85 -37342571.73 0.0084 0.0041

Mercury -106952-11-07 16:33 J -37342483.90 -37342483.81 -37342483.70 0.0084 0.0055

Mercury -106951-02-03 18:00 J -37342395.82 -37342395.75 -37342395.67 0.0083 0.0068

Mercury -106951-05-02 18:57 J -37342307.72 -37342307.71 -37342307.67 0.0083 0.0081

Venus -106947-04-05 22:48 J -37340873.74 -37340873.55 -37340873.34 0.0081 0.0029

Venus -106947-11-17 08:24 J -37340648.31 -37340648.15 -37340647.97 0.0081 0.0047

Earth -106944-08-15 19:55 J -37339645.86 -37339645.67 -37339645.44 0.0079 0.0043

Moon -106944-08-15 20:24 J -37339645.84 -37339645.65 -37339645.43 0.0079 0.0041 \*

Mercury -106801-04-06 15:07 J -37287545.90 -37287545.87 -37287545.81 0.0060 0.0059

Mercury -106801-07-03 16:19 J -37287457.90 -37287457.82 -37287457.69 0.0060 0.0052

Mercury -106801-09-29 18:14 J -37287369.87 -37287369.74 -37287369.60 0.0060 0.0044

Mercury -106801-12-26 19:26 J -37287281.83 -37287281.69 -37287281.52 0.0060 0.0037

Mercury -106800-03-24 20:52 J -37287193.79 -37287193.63 -37287193.44 0.0060 0.0029

Mercury -106800-06-20 22:33 J -37287105.74 -37287105.56 -37287105.37 0.0060 0.0022

Mercury -106800-09-17 00:14 J -37287017.68 -37287017.49 -37287017.30 0.0061 0.0014

Mercury -106800-12-14 01:40 J -37286929.63 -37286929.43 -37286929.23 0.0061 0.0006

Mercury -106799-03-12 03:07 J -37286841.56 -37286841.37 -37286841.17 0.0061 0.0001

Mercury -106799-06-08 04:33 J -37286753.50 -37286753.31 -37286753.11 0.0061 0.0009

Mercury -106799-09-04 06:14 J -37286665.43 -37286665.24 -37286665.05 0.0061 0.0016

Mercury -106799-12-01 07:26 J -37286577.36 -37286577.19 -37286577.00 0.0061 0.0024

Mercury -106798-02-27 08:38 J -37286489.29 -37286489.14 -37286488.95 0.0061 0.0032

Mercury -106798-05-26 10:19 J -37286401.21 -37286401.07 -37286400.91 0.0061 0.0039

Mercury -106798-08-22 11:45 J -37286313.12 -37286313.01 -37286312.87 0.0061 0.0047

Mercury -106798-11-18 12:57 J -37286225.02 -37286224.96 -37286224.85 0.0061 0.0055

Venus -106790-06-10 23:31 J -37283463.68 -37283463.52 -37283463.30 0.0064 0.0036

Venus -106789-01-22 04:33 J -37283238.53 -37283238.31 -37283238.08 0.0064 0.0005

Venus -106789-09-03 08:52 J -37283013.28 -37283013.13 -37283012.95 0.0064 0.0044

Mars -106787-03-21 18:28 J -37282448.90 -37282448.73 -37282448.49 0.0064 0.0047



Moon -106785-02-15 23:45 J -37281752.74 -37281752.51 -37281752.24 0.0065 0.0028  
 Earth -106785-02-16 02:24 J -37281752.64 -37281752.40 -37281752.15 0.0065 0.0026 \*  
 Earth -106784-02-16 18:00 J -37281385.88 -37281385.75 -37281385.57 0.0066 0.0054  
 Moon -106784-02-16 21:50 J -37281385.70 -37281385.59 -37281385.44 0.0066 0.0057 \*  
 Mercury -106708-10-29 19:11 J -37253371.75 -37253371.70 -37253371.63 0.0085 0.0074  
 Mercury -106707-01-25 20:24 J -37253283.73 -37253283.65 -37253283.54 0.0085 0.0060  
 Mercury -106707-04-23 21:50 J -37253195.69 -37253195.59 -37253195.47 0.0084 0.0046  
 Mercury -106707-07-20 23:16 J -37253107.65 -37253107.53 -37253107.41 0.0084 0.0032  
 Mercury -106707-10-17 00:28 J -37253019.61 -37253019.48 -37253019.35 0.0084 0.0018  
 Mercury -106706-01-13 01:40 J -37252931.56 -37252931.43 -37252931.29 0.0084 0.0005  
 Mercury -106706-04-11 03:07 J -37252843.51 -37252843.37 -37252843.24 0.0084 0.0010  
 Mercury -106706-07-08 04:19 J -37252755.45 -37252755.32 -37252755.19 0.0084 0.0023  
 Mercury -106706-10-04 05:31 J -37252667.39 -37252667.27 -37252667.15 0.0084 0.0037  
 Mercury -106706-12-31 06:28 J -37252579.32 -37252579.23 -37252579.11 0.0084 0.0051  
 Mercury -106705-03-28 07:55 J -37252491.25 -37252491.17 -37252491.08 0.0083 0.0064  
 Mercury -106705-06-24 08:52 J -37252403.17 -37252403.13 -37252403.07 0.0083 0.0077  
 Venus -106701-05-04 02:38 J -37250993.56 -37250993.39 -37250993.19 0.0081 0.0039  
 Venus -106701-12-15 12:28 J -37250768.17 -37250767.98 -37250767.79 0.0081 0.0037  
 Mars -106700-08-18 06:28 J -37250522.45 -37250522.23 -37250521.94 0.0080 0.0053  
 Earth -106698-08-17 13:26 J -37249793.19 -37249792.94 -37249792.69 0.0079 0.0005  
 Moon -106698-08-17 15:21 J -37249793.11 -37249792.86 -37249792.60 0.0079 0.0001 \*  
 Mercury -106555-05-30 03:21 J -37197641.37 -37197641.36 -37197641.30 0.0060 0.0060  
 Mercury -106555-08-26 04:47 J -37197553.37 -37197553.30 -37197553.17 0.0060 0.0052  
 Mercury -106555-11-22 06:28 J -37197465.34 -37197465.23 -37197465.08 0.0060 0.0045  
 Mercury -106554-02-18 07:55 J -37197377.31 -37197377.17 -37197377.00 0.0060 0.0037  
 Mercury -106554-05-17 09:35 J -37197289.26 -37197289.10 -37197288.92 0.0060 0.0030  
 Mercury -106554-08-13 11:02 J -37197201.21 -37197201.04 -37197200.85 0.0060 0.0022  
 Mercury -106554-11-09 12:43 J -37197113.16 -37197112.97 -37197112.78 0.0061 0.0015  
 Mercury -106553-02-05 14:09 J -37197025.10 -37197024.91 -37197024.71 0.0061 0.0007  
 Mercury -106553-05-03 15:35 J -37196937.04 -37196936.85 -37196936.65 0.0061 0.0001

Mercury -106553-07-30 17:02 J -37196848.98 -37196848.79 -37196848.59 0.0061 0.0008

Mercury -106553-10-26 18:28 J -37196760.91 -37196760.73 -37196760.53 0.0061 0.0016

Mercury -106552-01-22 19:55 J -37196672.84 -37196672.67 -37196672.48 0.0061 0.0023

Mercury -106552-04-20 21:21 J -37196584.77 -37196584.61 -37196584.43 0.0061 0.0031

Mercury -106552-07-17 22:33 J -37196496.69 -37196496.56 -37196496.38 0.0061 0.0039

Mercury -106552-10-14 00:14 J -37196408.60 -37196408.49 -37196408.35 0.0061 0.0047

Mercury -106551-01-10 01:40 J -37196320.50 -37196320.43 -37196320.32 0.0061 0.0054

Venus -106544-07-09 05:16 J -37193583.44 -37193583.28 -37193583.06 0.0063 0.0035

Venus -106543-02-19 10:33 J -37193358.29 -37193358.06 -37193357.83 0.0064 0.0005

Venus -106543-10-02 14:23 J -37193133.03 -37193132.90 -37193132.71 0.0064 0.0045

Earth -106539-02-16 20:52 J -37191899.81 -37191899.63 -37191899.45 0.0065 0.0048

Moon -106539-02-16 19:55 J -37191899.80 -37191899.67 -37191899.47 0.0065 0.0052 \*

Moon -106538-02-18 11:16 J -37191533.25 -37191533.03 -37191532.77 0.0066 0.0035

Earth -106538-02-18 12:28 J -37191533.19 -37191532.98 -37191532.71 0.0066 0.0032 \*

Mercury -106462-12-22 09:35 J -37163467.15 -37163467.10 -37163467.03 0.0085 0.0074

Mercury -106461-03-19 11:02 J -37163379.13 -37163379.04 -37163378.95 0.0085 0.0060

Mercury -106461-06-15 11:59 J -37163291.10 -37163291.00 -37163290.88 0.0084 0.0047

Mercury -106461-09-11 13:26 J -37163203.06 -37163202.94 -37163202.81 0.0084 0.0032

Mercury -106461-12-08 14:52 J -37163115.01 -37163114.88 -37163114.75 0.0084 0.0018

Mercury -106460-03-06 16:04 J -37163026.96 -37163026.83 -37163026.70 0.0084 0.0005

Mercury -106460-06-02 17:16 J -37162938.91 -37162938.78 -37162938.65 0.0084 0.0009

Mercury -106460-08-29 18:28 J -37162850.85 -37162850.73 -37162850.60 0.0084 0.0023

Mercury -106460-11-25 19:55 J -37162762.79 -37162762.67 -37162762.55 0.0084 0.0036

Mercury -106459-02-21 20:52 J -37162674.73 -37162674.63 -37162674.52 0.0084 0.0050

Mercury -106459-05-20 22:19 J -37162586.66 -37162586.57 -37162586.49 0.0083 0.0063

Mercury -106459-08-16 23:16 J -37162498.57 -37162498.53 -37162498.47 0.0083 0.0076

Venus -106455-06-02 08:09 J -37161113.34 -37161113.16 -37161112.97 0.0081 0.0041

Venus -106454-01-13 17:45 J -37160887.95 -37160887.76 -37160887.56 0.0081 0.0035

Mars -106453-01-09 05:02 J -37160527.62 -37160527.29 -37160526.95 0.0080 0.0004

Moon -106452-08-18 05:16 J -37159940.50 -37159940.28 -37159940.04 0.0079 0.0030

Earth -106452-08-18 08:52 J -37159940.35 -37159940.13 -37159939.89 0.0079 0.0026 \*  
 Mercury -106309-10-17 17:16 J -37107648.85 -37107648.78 -37107648.67 0.0060 0.0053  
 Mercury -106308-01-13 18:28 J -37107560.83 -37107560.73 -37107560.57 0.0060 0.0047  
 Mercury -106308-04-11 20:23 J -37107472.79 -37107472.65 -37107472.49 0.0060 0.0039  
 Mercury -106308-07-08 21:35 J -37107384.75 -37107384.60 -37107384.41 0.0060 0.0032  
 Mercury -106308-10-04 23:31 J -37107296.70 -37107296.52 -37107296.34 0.0060 0.0024  
 Mercury -106307-01-01 00:43 J -37107208.65 -37107208.47 -37107208.27 0.0061 0.0017  
 Mercury -106307-03-30 02:23 J -37107120.59 -37107120.40 -37107120.20 0.0061 0.0009  
 Mercury -106307-06-26 04:04 J -37107032.53 -37107032.33 -37107032.14 0.0061 0.0002  
 Mercury -106307-09-22 05:16 J -37106944.47 -37106944.28 -37106944.08 0.0061 0.0007  
 Mercury -106307-12-19 06:43 J -37106856.40 -37106856.22 -37106856.02 0.0061 0.0014  
 Mercury -106306-03-17 08:09 J -37106768.33 -37106768.16 -37106767.96 0.0061 0.0022  
 Mercury -106306-06-13 09:35 J -37106680.26 -37106680.10 -37106679.91 0.0061 0.0029  
 Mercury -106306-09-09 11:02 J -37106592.18 -37106592.04 -37106591.87 0.0061 0.0037  
 Mercury -106306-12-06 12:43 J -37106504.09 -37106503.97 -37106503.83 0.0061 0.0044  
 Mercury -106305-03-03 13:55 J -37106416.00 -37106415.92 -37106415.80 0.0061 0.0053  
 Mercury -106305-05-30 15:21 J -37106327.87 -37106327.86 -37106327.80 0.0061 0.0060  
 Venus -106298-08-07 10:04 J -37103703.25 -37103703.08 -37103702.87 0.0063 0.0036  
 Venus -106297-03-19 14:52 J -37103478.10 -37103477.88 -37103477.64 0.0064 0.0004  
 Venus -106297-10-30 19:26 J -37103252.84 -37103252.69 -37103252.51 0.0064 0.0043  
 Moon -106292-02-19 03:21 J -37101680.62 -37101680.36 -37101680.09 0.0065 0.0009  
 Earth -106292-02-19 05:31 J -37101680.53 -37101680.27 -37101679.99 0.0065 0.0006 \*  
 Mercury -106215-02-12 23:45 J -37073562.56 -37073562.51 -37073562.44 0.0085 0.0076  
 Mercury -106215-05-12 01:11 J -37073474.54 -37073474.45 -37073474.36 0.0085 0.0062  
 Mercury -106215-08-08 02:23 J -37073386.50 -37073386.40 -37073386.29 0.0085 0.0048  
 Mercury -106215-11-04 03:35 J -37073298.46 -37073298.35 -37073298.22 0.0084 0.0034  
 Mercury -106214-01-31 05:02 J -37073210.42 -37073210.29 -37073210.16 0.0084 0.0020  
 Mercury -106214-04-29 06:14 J -37073122.37 -37073122.24 -37073122.11 0.0084 0.0007  
 Mercury -106214-07-26 07:26 J -37073034.32 -37073034.19 -37073034.05 0.0084 0.0007  
 Mercury -106214-10-22 08:38 J -37072946.26 -37072946.14 -37072946.01 0.0084 0.0021

Mercury -106213-01-18 09:50 J -37072858.20 -37072858.09 -37072857.96 0.0084 0.0034  
 Mercury -106213-04-15 11:02 J -37072770.14 -37072770.04 -37072769.92 0.0084 0.0048  
 Mercury -106213-07-12 12:14 J -37072682.07 -37072681.99 -37072681.89 0.0084 0.0061  
 Mercury -106213-10-08 13:26 J -37072593.99 -37072593.94 -37072593.87 0.0083 0.0075  
 Venus -106209-06-30 12:57 J -37071233.13 -37071232.96 -37071232.78 0.0081 0.0045  
 Venus -106208-02-10 22:33 J -37071007.75 -37071007.56 -37071007.35 0.0081 0.0031  
 Mars -106207-06-01 00:14 J -37070532.70 -37070532.49 -37070532.22 0.0080 0.0057  
 Earth -106206-08-20 03:50 J -37070087.49 -37070087.34 -37070087.15 0.0080 0.0059  
 Moon -106206-08-20 05:02 J -37070087.43 -37070087.29 -37070087.13 0.0080 0.0062 \*  
 Moon -106205-08-21 00:57 J -37069720.51 -37069720.46 -37069720.33 0.0079 0.0074  
 Earth -106205-08-21 04:33 J -37069720.41 -37069720.31 -37069720.20 0.0079 0.0071 \*  
 Mercury -106063-09-13 04:47 J -37017832.31 -37017832.30 -37017832.26 0.0060 0.0060  
 Mercury -106063-12-10 05:59 J -37017744.32 -37017744.25 -37017744.13 0.0060 0.0053  
 Mercury -106062-03-08 08:09 J -37017656.29 -37017656.16 -37017656.03 0.0060 0.0045  
 Mercury -106062-06-04 09:07 J -37017568.26 -37017568.12 -37017567.95 0.0060 0.0038  
 Mercury -106062-08-31 10:33 J -37017480.21 -37017480.06 -37017479.87 0.0060 0.0031  
 Mercury -106062-11-27 12:14 J -37017392.16 -37017391.99 -37017391.80 0.0060 0.0023  
 Mercury -106061-02-23 13:40 J -37017304.11 -37017303.93 -37017303.73 0.0061 0.0016  
 Mercury -106061-05-21 15:21 J -37017216.05 -37017215.86 -37017215.66 0.0061 0.0008  
 Mercury -106061-08-17 16:47 J -37017127.99 -37017127.80 -37017127.60 0.0061 0.0002  
 Mercury -106061-11-13 18:14 J -37017039.93 -37017039.74 -37017039.54 0.0061 0.0008  
 Mercury -106060-02-09 19:40 J -37016951.86 -37016951.68 -37016951.48 0.0061 0.0015  
 Mercury -106060-05-08 21:07 J -37016863.79 -37016863.62 -37016863.43 0.0061 0.0023  
 Mercury -106060-08-04 22:47 J -37016775.72 -37016775.55 -37016775.37 0.0061 0.0030  
 Mercury -106060-10-31 23:59 J -37016687.64 -37016687.50 -37016687.33 0.0061 0.0038  
 Mercury -106059-01-28 01:40 J -37016599.55 -37016599.43 -37016599.29 0.0061 0.0046  
 Mercury -106059-04-26 02:52 J -37016511.45 -37016511.38 -37016511.26 0.0061 0.0054  
 Mercury -106059-07-23 04:33 J -37016423.31 -37016423.31 -37016423.28 0.0061 0.0061  
 Venus -106052-09-04 16:19 J -37013823.01 -37013822.82 -37013822.62 0.0063 0.0032  
 Venus -106051-04-17 20:52 J -37013597.85 -37013597.63 -37013597.40 0.0064 0.0007

Venus -106051-11-29 01:11 J -37013372.58 -37013372.45 -37013372.27 0.0064 0.0047

Earth -106046-02-21 01:11 J -37011827.71 -37011827.45 -37011827.18 0.0065 0.0013

Moon -106046-02-21 04:47 J -37011827.55 -37011827.30 -37011827.02 0.0065 0.0011 \*

# 106TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 106th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-105969-04-06 14:09 J	-36983657.95	-36983657.91	-36983657.84	0.0085	0.0076		
Mercury	-105969-07-03 15:35 J	-36983569.93	-36983569.85	-36983569.75	0.0085	0.0062		
Mercury	-105969-09-29 17:02 J	-36983481.90	-36983481.79	-36983481.68	0.0085	0.0048		
Mercury	-105969-12-26 18:14 J	-36983393.86	-36983393.74	-36983393.62	0.0084	0.0034		
Mercury	-105968-03-24 19:26 J	-36983305.81	-36983305.69	-36983305.56	0.0084	0.0020		
Mercury	-105968-06-20 20:52 J	-36983217.76	-36983217.63	-36983217.50	0.0084	0.0006		
Mercury	-105968-09-16 22:04 J	-36983129.71	-36983129.58	-36983129.45	0.0084	0.0007		
Mercury	-105968-12-13 23:16 J	-36983041.66	-36983041.53	-36983041.40	0.0084	0.0021		
Mercury	-105967-03-12 00:14 J	-36982953.60	-36982953.49	-36982953.36	0.0084	0.0035		
Mercury	-105967-06-08 01:40 J	-36982865.54	-36982865.43	-36982865.32	0.0084	0.0048		
Mercury	-105967-09-04 02:38 J	-36982777.46	-36982777.39	-36982777.29	0.0084	0.0062		
Mercury	-105967-12-01 03:50 J	-36982689.38	-36982689.34	-36982689.27	0.0083	0.0075		
Venus	-105963-07-29 18:14 J	-36981352.90	-36981352.74	-36981352.55	0.0081	0.0047		

Venus -105962-03-12 03:50 J -36981127.52 -36981127.34 -36981127.12 0.0081 0.0031

Moon -105959-08-22 23:31 J -36979867.70 -36979867.52 -36979867.31 0.0079 0.0045

Earth -105959-08-23 01:11 J -36979867.66 -36979867.45 -36979867.25 0.0079 0.0044 \*

Mercury -105817-11-04 17:31 J -36927927.79 -36927927.77 -36927927.69 0.0060 0.0058

Mercury -105816-01-31 19:26 J -36927839.79 -36927839.69 -36927839.57 0.0060 0.0050

Mercury -105816-04-29 20:38 J -36927751.76 -36927751.64 -36927751.48 0.0060 0.0044

Mercury -105816-07-26 22:33 J -36927663.72 -36927663.56 -36927663.40 0.0060 0.0036

Mercury -105816-10-22 23:45 J -36927575.67 -36927575.51 -36927575.32 0.0060 0.0029

Mercury -105815-01-19 01:11 J -36927487.62 -36927487.45 -36927487.25 0.0060 0.0021

Mercury -105815-04-17 02:52 J -36927399.57 -36927399.38 -36927399.18 0.0061 0.0014

Mercury -105815-07-14 04:33 J -36927311.51 -36927311.31 -36927311.12 0.0061 0.0006

Mercury -105815-10-10 05:59 J -36927223.45 -36927223.25 -36927223.05 0.0061 0.0001

Mercury -105814-01-06 07:26 J -36927135.38 -36927135.19 -36927134.99 0.0061 0.0009

Mercury -105814-04-04 08:38 J -36927047.31 -36927047.14 -36927046.94 0.0061 0.0017

Mercury -105814-07-01 10:19 J -36926959.24 -36926959.07 -36926958.88 0.0061 0.0024

Mercury -105814-09-27 11:31 J -36926871.17 -36926871.02 -36926870.83 0.0061 0.0032

Mercury -105814-12-24 13:26 J -36926783.09 -36926782.94 -36926782.79 0.0061 0.0039

Mercury -105813-03-21 14:38 J -36926695.00 -36926694.89 -36926694.75 0.0061 0.0047

Mercury -105813-06-17 15:50 J -36926606.90 -36926606.84 -36926606.73 0.0061 0.0055

Venus -105806-10-03 23:02 J -36923942.74 -36923942.54 -36923942.32 0.0063 0.0027

Venus -105805-05-16 03:35 J -36923717.56 -36923717.35 -36923717.12 0.0064 0.0013

Venus -105805-12-27 07:55 J -36923492.28 -36923492.17 -36923492.01 0.0064 0.0052

Moon -105800-02-21 21:07 J -36921974.85 -36921974.62 -36921974.34 0.0065 0.0029

Earth -105800-02-21 21:07 J -36921974.84 -36921974.62 -36921974.36 0.0065 0.0029 \*

Earth -105799-02-23 13:26 J -36921608.09 -36921607.94 -36921607.75 0.0066 0.0051

Moon -105799-02-23 15:21 J -36921607.99 -36921607.86 -36921607.66 0.0066 0.0052 \*

Mercury -105723-05-30 05:02 J -36893753.34 -36893753.29 -36893753.22 0.0085 0.0074

Mercury -105723-08-26 06:14 J -36893665.32 -36893665.24 -36893665.13 0.0085 0.0060

Mercury -105723-11-22 07:40 J -36893577.28 -36893577.18 -36893577.06 0.0085 0.0046

Mercury -105722-02-18 09:07 J -36893489.24 -36893489.12 -36893489.00 0.0084 0.0032

Mercury -105722-05-17 10:19 J -36893401.20 -36893401.07 -36893400.94 0.0084 0.0018  
 Mercury -105722-08-13 11:31 J -36893313.15 -36893313.02 -36893312.88 0.0084 0.0005  
 Mercury -105722-11-09 12:43 J -36893225.10 -36893224.97 -36893224.83 0.0084 0.0010  
 Mercury -105721-02-05 13:55 J -36893137.04 -36893136.92 -36893136.79 0.0084 0.0023  
 Mercury -105721-05-03 15:21 J -36893048.98 -36893048.86 -36893048.74 0.0084 0.0036  
 Mercury -105721-07-30 16:19 J -36892960.92 -36892960.82 -36892960.71 0.0084 0.0050  
 Mercury -105721-10-26 17:45 J -36892872.85 -36892872.76 -36892872.67 0.0084 0.0063  
 Mercury -105720-01-22 18:43 J -36892784.76 -36892784.72 -36892784.66 0.0083 0.0076  
 Venus -105717-08-27 00:57 J -36891472.63 -36891472.46 -36891472.27 0.0081 0.0043  
 Venus -105716-04-09 10:33 J -36891247.24 -36891247.06 -36891246.85 0.0081 0.0035  
 Earth -105713-08-23 22:19 J -36890014.80 -36890014.57 -36890014.33 0.0079 0.0020  
 Moon -105713-08-24 01:26 J -36890014.66 -36890014.44 -36890014.19 0.0079 0.0022 \*  
 Mercury -105571-10-01 07:26 J -36838111.23 -36838111.19 -36838111.14 0.0060 0.0059  
 Mercury -105571-12-28 08:38 J -36838023.23 -36838023.14 -36838023.02 0.0060 0.0052  
 Mercury -105570-03-26 09:50 J -36837935.20 -36837935.09 -36837934.93 0.0060 0.0045  
 Mercury -105570-06-22 11:45 J -36837847.16 -36837847.01 -36837846.85 0.0060 0.0037  
 Mercury -105570-09-18 12:57 J -36837759.11 -36837758.96 -36837758.77 0.0060 0.0030  
 Mercury -105570-12-15 14:52 J -36837671.06 -36837670.88 -36837670.70 0.0061 0.0022  
 Mercury -105569-03-12 16:04 J -36837583.01 -36837582.83 -36837582.63 0.0061 0.0015  
 Mercury -105569-06-08 17:45 J -36837494.95 -36837494.76 -36837494.56 0.0061 0.0007  
 Mercury -105569-09-04 19:11 J -36837406.89 -36837406.70 -36837406.50 0.0061 0.0001  
 Mercury -105569-12-01 20:38 J -36837318.83 -36837318.64 -36837318.44 0.0061 0.0008  
 Mercury -105568-02-27 22:04 J -36837230.76 -36837230.58 -36837230.38 0.0061 0.0016  
 Mercury -105568-05-26 23:31 J -36837142.69 -36837142.52 -36837142.33 0.0061 0.0023  
 Mercury -105568-08-23 00:57 J -36837054.62 -36837054.46 -36837054.28 0.0061 0.0031  
 Mercury -105568-11-19 02:38 J -36836966.54 -36836966.39 -36836966.23 0.0061 0.0038  
 Mercury -105567-02-15 03:50 J -36836878.45 -36836878.34 -36836878.19 0.0061 0.0046  
 Mercury -105567-05-14 05:02 J -36836790.35 -36836790.29 -36836790.17 0.0061 0.0055  
 Venus -105560-03-21 04:33 J -36834287.43 -36834287.31 -36834287.15 0.0063 0.0050  
 Venus -105560-11-01 09:35 J -36834062.33 -36834062.10 -36834061.88 0.0063 0.0011

Venus -105559-06-14 13:55 J -36833837.12 -36833836.92 -36833836.71 0.0064 0.0028  
 Mars -105557-04-18 03:21 J -36833163.63 -36833163.36 -36833163.06 0.0064 0.0020  
 Moon -105554-02-23 19:40 J -36832121.88 -36832121.68 -36832121.42 0.0065 0.0033  
 Earth -105554-02-23 23:31 J -36832121.74 -36832121.52 -36832121.27 0.0065 0.0032 \*  
 Earth -105553-02-25 15:07 J -36831755.01 -36831754.87 -36831754.65 0.0066 0.0049  
 Moon -105553-02-25 18:14 J -36831754.90 -36831754.74 -36831754.53 0.0066 0.0049 \*  
 Mercury -105477-04-24 20:09 J -36803936.72 -36803936.66 -36803936.60 0.0085 0.0075  
 Mercury -105477-07-21 21:21 J -36803848.70 -36803848.61 -36803848.51 0.0085 0.0061  
 Mercury -105477-10-17 22:33 J -36803760.66 -36803760.56 -36803760.44 0.0085 0.0047  
 Mercury -105476-01-13 23:59 J -36803672.62 -36803672.50 -36803672.38 0.0084 0.0033  
 Mercury -105476-04-12 01:11 J -36803584.58 -36803584.45 -36803584.32 0.0084 0.0020  
 Mercury -105476-07-09 02:23 J -36803496.53 -36803496.40 -36803496.26 0.0084 0.0007  
 Mercury -105476-10-05 03:35 J -36803408.48 -36803408.35 -36803408.21 0.0084 0.0008  
 Mercury -105475-01-01 05:02 J -36803320.42 -36803320.29 -36803320.16 0.0084 0.0021  
 Mercury -105475-03-30 05:59 J -36803232.36 -36803232.25 -36803232.12 0.0084 0.0035  
 Mercury -105475-06-26 07:26 J -36803144.30 -36803144.19 -36803144.08 0.0084 0.0048  
 Mercury -105475-09-22 08:23 J -36803056.23 -36803056.15 -36803056.05 0.0083 0.0061  
 Mercury -105475-12-19 09:35 J -36802968.14 -36802968.10 -36802968.03 0.0083 0.0075  
 Venus -105471-09-25 12:43 J -36801592.17 -36801591.97 -36801591.75 0.0081 0.0018  
 Venus -105470-05-08 22:04 J -36801366.70 -36801366.58 -36801366.41 0.0081 0.0059  
 Moon -105467-08-26 02:38 J -36800161.63 -36800161.39 -36800161.13 0.0079 0.0017  
 Earth -105467-08-26 03:35 J -36800161.58 -36800161.35 -36800161.10 0.0079 0.0018 \*  
 Mercury -105325-08-26 20:09 J -36748294.67 -36748294.66 -36748294.59 0.0060 0.0060  
 Mercury -105325-11-22 22:04 J -36748206.67 -36748206.58 -36748206.47 0.0060 0.0052  
 Mercury -105324-02-18 23:31 J -36748118.64 -36748118.52 -36748118.37 0.0060 0.0044  
 Mercury -105324-05-18 00:43 J -36748030.60 -36748030.47 -36748030.29 0.0060 0.0038  
 Mercury -105324-08-14 02:38 J -36747942.56 -36747942.39 -36747942.21 0.0060 0.0030  
 Mercury -105324-11-10 03:50 J -36747854.51 -36747854.34 -36747854.14 0.0061 0.0023  
 Mercury -105323-02-06 05:45 J -36747766.45 -36747766.26 -36747766.07 0.0061 0.0015  
 Mercury -105323-05-05 06:57 J -36747678.39 -36747678.21 -36747678.00 0.0061 0.0008



Mercury -105323-08-01 08:38 J -36747590.33 -36747590.14 -36747589.94 0.0061 0.0001  
 Mercury -105323-10-28 10:04 J -36747502.27 -36747502.08 -36747501.88 0.0061 0.0008  
 Mercury -105322-01-24 11:31 J -36747414.20 -36747414.02 -36747413.82 0.0061 0.0015  
 Mercury -105322-04-22 12:57 J -36747326.13 -36747325.96 -36747325.77 0.0061 0.0023  
 Mercury -105322-07-19 14:38 J -36747238.06 -36747237.89 -36747237.72 0.0061 0.0030  
 Mercury -105322-10-15 15:50 J -36747149.98 -36747149.84 -36747149.67 0.0061 0.0038  
 Mercury -105321-01-11 17:45 J -36747061.89 -36747061.76 -36747061.63 0.0061 0.0046  
 Mercury -105321-04-08 18:43 J -36746973.79 -36746973.72 -36746973.60 0.0061 0.0054  
 Mercury -105321-07-05 20:23 J -36746885.65 -36746885.65 -36746885.62 0.0061 0.0061  
 Venus -105314-04-19 14:38 J -36744407.06 -36744406.89 -36744406.68 0.0063 0.0033  
 Venus -105314-11-30 19:40 J -36744181.90 -36744181.68 -36744181.45 0.0064 0.0006  
 Venus -105313-07-12 23:59 J -36743956.64 -36743956.50 -36743956.32 0.0064 0.0045  
 Mars -105311-09-09 19:55 J -36743167.91 -36743167.67 -36743167.39 0.0065 0.0032  
 Earth -105308-02-25 02:38 J -36742268.61 -36742268.39 -36742268.15 0.0065 0.0034  
 Moon -105308-02-25 04:47 J -36742268.50 -36742268.30 -36742268.06 0.0065 0.0036 \*  
 Moon -105307-02-26 15:50 J -36741902.01 -36741901.84 -36741901.64 0.0066 0.0048  
 Earth -105307-02-26 18:43 J -36741901.88 -36741901.72 -36741901.50 0.0066 0.0047 \*  
 Mercury -105231-03-21 11:16 J -36714120.08 -36714120.03 -36714119.96 0.0085 0.0075  
 Mercury -105231-06-17 12:43 J -36714032.05 -36714031.97 -36714031.87 0.0085 0.0061  
 Mercury -105231-09-13 13:55 J -36713944.02 -36713943.92 -36713943.80 0.0085 0.0047  
 Mercury -105231-12-10 15:21 J -36713855.98 -36713855.86 -36713855.74 0.0084 0.0033  
 Mercury -105230-03-08 16:33 J -36713767.94 -36713767.81 -36713767.68 0.0084 0.0019  
 Mercury -105230-06-04 17:45 J -36713679.89 -36713679.76 -36713679.62 0.0084 0.0006  
 Mercury -105230-08-31 19:11 J -36713591.83 -36713591.70 -36713591.57 0.0084 0.0008  
 Mercury -105230-11-27 20:09 J -36713503.78 -36713503.66 -36713503.52 0.0084 0.0022  
 Mercury -105229-02-23 21:35 J -36713415.72 -36713415.60 -36713415.48 0.0084 0.0035  
 Mercury -105229-05-21 22:33 J -36713327.66 -36713327.56 -36713327.44 0.0084 0.0049  
 Mercury -105229-08-17 23:45 J -36713239.59 -36713239.51 -36713239.41 0.0084 0.0062  
 Mercury -105229-11-14 01:11 J -36713151.50 -36713151.45 -36713151.39 0.0083 0.0075  
 Venus -105225-03-12 15:35 J -36711936.97 -36711936.85 -36711936.71 0.0082 0.0064

Venus -105225-10-24 01:26 J -36711711.64 -36711711.44 -36711711.22 0.0081 0.0013

Mars -105223-02-02 07:11 J -36711245.33 -36711245.20 -36711244.99 0.0081 0.0070

Moon -105221-08-27 07:55 J -36710308.40 -36710308.17 -36710307.93 0.0079 0.0020

Earth -105221-08-27 10:47 J -36710308.28 -36710308.05 -36710307.80 0.0079 0.0023 \*

Mercury -105079-07-23 11:02 J -36658478.10 -36658478.04 -36658477.96 0.0060 0.0056

Mercury -105079-10-19 12:14 J -36658390.08 -36658389.99 -36658389.85 0.0060 0.0049

Mercury -105078-01-15 13:40 J -36658302.05 -36658301.93 -36658301.76 0.0060 0.0042

Mercury -105078-04-13 15:35 J -36658214.01 -36658213.85 -36658213.68 0.0060 0.0034

Mercury -105078-07-10 16:47 J -36658125.96 -36658125.80 -36658125.61 0.0060 0.0027

Mercury -105078-10-06 18:43 J -36658037.91 -36658037.72 -36658037.53 0.0061 0.0019

Mercury -105077-01-02 19:55 J -36657949.85 -36657949.67 -36657949.47 0.0061 0.0012

Mercury -105077-03-30 21:35 J -36657861.79 -36657861.60 -36657861.40 0.0061 0.0004

Mercury -105077-06-26 23:02 J -36657773.73 -36657773.54 -36657773.34 0.0061 0.0004

Mercury -105077-09-23 00:28 J -36657685.66 -36657685.48 -36657685.28 0.0061 0.0011

Mercury -105077-12-20 01:55 J -36657597.60 -36657597.42 -36657597.22 0.0061 0.0019

Mercury -105076-03-18 03:35 J -36657509.52 -36657509.35 -36657509.17 0.0061 0.0026

Mercury -105076-06-14 04:47 J -36657421.45 -36657421.30 -36657421.12 0.0061 0.0034

Mercury -105076-09-10 06:28 J -36657333.36 -36657333.23 -36657333.07 0.0061 0.0041

Mercury -105076-12-07 07:40 J -36657245.27 -36657245.18 -36657245.04 0.0061 0.0050

Mercury -105075-03-05 09:50 J -36657157.16 -36657157.09 -36657157.02 0.0061 0.0057

Venus -105069-10-04 23:02 J -36654751.68 -36654751.54 -36654751.38 0.0063 0.0048

Venus -105068-05-18 03:35 J -36654526.57 -36654526.35 -36654526.11 0.0063 0.0010

Venus -105068-12-29 08:09 J -36654301.35 -36654301.16 -36654300.94 0.0064 0.0030

Earth -105062-02-27 10:04 J -36652415.32 -36652415.08 -36652414.82 0.0066 0.0026

Moon -105062-02-27 12:14 J -36652415.22 -36652414.99 -36652414.72 0.0066 0.0028 \*

Moon -105061-02-29 01:40 J -36652048.52 -36652048.43 -36652048.27 0.0066 0.0058

Earth -105061-02-29 02:23 J -36652048.52 -36652048.40 -36652048.23 0.0066 0.0055 \*

# 105TH MILLENNIUM

# BCE

**This is a list of transits visible from Pluto in the 105th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-104986-11-19 02:23 J	-36624391.42	-36624391.40	-36624391.35	0.0085	0.0081		
Mercury	-104985-02-15 03:50 J	-36624303.41	-36624303.34	-36624303.25	0.0085	0.0067		
Mercury	-104985-05-13 05:02 J	-36624215.38	-36624215.29	-36624215.18	0.0085	0.0053		
Mercury	-104985-08-09 06:14 J	-36624127.35	-36624127.24	-36624127.11	0.0084	0.0040		
Mercury	-104985-11-05 07:40 J	-36624039.30	-36624039.18	-36624039.05	0.0084	0.0025		
Mercury	-104984-02-01 08:52 J	-36623951.26	-36623951.13	-36623950.99	0.0084	0.0012		
Mercury	-104984-04-30 10:19 J	-36623863.21	-36623863.07	-36623862.94	0.0084	0.0003		
Mercury	-104984-07-27 11:31 J	-36623775.15	-36623775.02	-36623774.89	0.0084	0.0015		
Mercury	-104984-10-23 12:28 J	-36623687.09	-36623686.98	-36623686.85	0.0084	0.0029		
Mercury	-104983-01-19 13:55 J	-36623599.03	-36623598.92	-36623598.81	0.0084	0.0042		
Mercury	-104983-04-17 14:52 J	-36623510.97	-36623510.88	-36623510.77	0.0084	0.0056		
Mercury	-104983-07-14 16:04 J	-36623422.89	-36623422.83	-36623422.74	0.0083	0.0069		
Mercury	-104983-10-10 17:16 J	-36623334.79	-36623334.78	-36623334.74	0.0083	0.0082		
Venus	-104979-04-11 07:11 J	-36622056.39	-36622056.20	-36622055.98	0.0081	0.0020		
Venus	-104979-11-22 16:47 J	-36621830.93	-36621830.80	-36621830.63	0.0081	0.0058		
Earth	-104975-08-29 22:47 J	-36620454.76	-36620454.55	-36620454.34	0.0079	0.0041		
Moon	-104975-08-30 00:43 J	-36620454.67	-36620454.47	-36620454.25	0.0079	0.0039	*	
Mercury	-104833-06-18 01:11 J	-36568661.53	-36568661.45	-36568661.35	0.0060	0.0054		
Mercury	-104833-09-14 02:23 J	-36568573.50	-36568573.40	-36568573.25	0.0060	0.0047		

Mercury -104833-12-11 04:18 J -36568485.46 -36568485.32 -36568485.16 0.0060 0.0039

Mercury -104832-03-09 05:30 J -36568397.42 -36568397.27 -36568397.09 0.0060 0.0032

Mercury -104832-06-05 06:57 J -36568309.37 -36568309.21 -36568309.01 0.0061 0.0025

Mercury -104832-09-01 08:38 J -36568221.32 -36568221.14 -36568220.94 0.0061 0.0017

Mercury -104832-11-28 10:04 J -36568133.26 -36568133.08 -36568132.87 0.0061 0.0010

Mercury -104831-02-24 11:45 J -36568045.20 -36568045.01 -36568044.81 0.0061 0.0002

Mercury -104831-05-23 13:11 J -36567957.14 -36567956.95 -36567956.75 0.0061 0.0006

Mercury -104831-08-19 14:52 J -36567869.07 -36567868.88 -36567868.69 0.0061 0.0013

Mercury -104831-11-15 16:04 J -36567781.00 -36567780.83 -36567780.63 0.0061 0.0021

Mercury -104830-02-11 17:45 J -36567692.93 -36567692.76 -36567692.58 0.0061 0.0028

Mercury -104830-05-10 18:57 J -36567604.85 -36567604.71 -36567604.53 0.0061 0.0036

Mercury -104830-08-06 20:23 J -36567516.76 -36567516.65 -36567516.49 0.0061 0.0044

Mercury -104830-11-02 22:04 J -36567428.67 -36567428.58 -36567428.46 0.0061 0.0052

Mercury -104829-01-29 23:16 J -36567340.55 -36567340.53 -36567340.45 0.0061 0.0060

Venus -104823-11-03 11:02 J -36564871.23 -36564871.04 -36564870.82 0.0063 0.0027

Venus -104822-06-16 15:35 J -36564646.06 -36564645.85 -36564645.61 0.0064 0.0013

Venus -104821-01-27 20:23 J -36564420.78 -36564420.65 -36564420.51 0.0064 0.0051

Mars -104820-08-03 14:38 J -36563866.96 -36563866.89 -36563866.76 0.0064 0.0061

Moon -104816-02-28 11:59 J -36562562.24 -36562562.00 -36562561.72 0.0066 0.0024

Earth -104816-02-28 15:35 J -36562562.09 -36562561.85 -36562561.58 0.0066 0.0021 \*

Jupiter -104816-12-07 15:50 J -36562280.21 -36562279.84 -36562279.36 0.0066 0.0044

Earth -104815-03-02 08:09 J -36562195.25 -36562195.16 -36562195.04 0.0066 0.0060

Moon -104815-03-02 12:14 J -36562195.06 -36562194.99 -36562194.91 0.0066 0.0064 \*

Mercury -104740-10-14 18:42 J -36534574.78 -36534574.72 -36534574.67 0.0085 0.0075

Mercury -104739-01-10 19:40 J -36534486.76 -36534486.68 -36534486.58 0.0085 0.0062

Mercury -104739-04-08 21:06 J -36534398.73 -36534398.62 -36534398.51 0.0085 0.0048

Mercury -104739-07-05 22:18 J -36534310.69 -36534310.57 -36534310.44 0.0084 0.0034

Mercury -104739-10-01 23:30 J -36534222.64 -36534222.52 -36534222.38 0.0084 0.0021

Mercury -104739-12-29 00:57 J -36534134.59 -36534134.46 -36534134.33 0.0084 0.0007

Mercury -104738-03-27 02:09 J -36534046.54 -36534046.41 -36534046.28 0.0084 0.0007

Mercury -104738-06-23 03:21 J -36533958.48 -36533958.36 -36533958.23 0.0084 0.0020  
 Mercury -104738-09-19 04:33 J -36533870.43 -36533870.31 -36533870.18 0.0084 0.0034  
 Mercury -104738-12-16 05:45 J -36533782.36 -36533782.26 -36533782.14 0.0084 0.0047  
 Mercury -104737-03-13 06:57 J -36533694.29 -36533694.21 -36533694.11 0.0084 0.0060  
 Mercury -104737-06-09 07:54 J -36533606.21 -36533606.17 -36533606.09 0.0083 0.0074  
 Venus -104734-09-27 12:42 J -36532401.12 -36532400.97 -36532400.81 0.0082 0.0056  
 Venus -104733-05-09 22:33 J -36532175.77 -36532175.56 -36532175.35 0.0081 0.0021  
 Moon -104730-08-30 05:30 J -36530968.35 -36530968.27 -36530968.15 0.0079 0.0072  
 Earth -104730-08-30 08:23 J -36530968.21 -36530968.15 -36530968.05 0.0079 0.0075 \*  
 Earth -104729-08-31 08:23 J -36530601.30 -36530601.15 -36530600.95 0.0079 0.0056  
 Moon -104729-08-31 11:16 J -36530601.21 -36530601.03 -36530600.83 0.0079 0.0053 \*  
 Mercury -104587-02-15 14:23 J -36478932.94 -36478932.90 -36478932.80 0.0060 0.0056  
 Mercury -104587-05-14 16:18 J -36478844.93 -36478844.82 -36478844.70 0.0060 0.0049  
 Mercury -104587-08-10 17:30 J -36478756.89 -36478756.77 -36478756.61 0.0060 0.0042  
 Mercury -104587-11-06 18:57 J -36478668.85 -36478668.71 -36478668.53 0.0060 0.0035  
 Mercury -104586-02-02 20:38 J -36478580.80 -36478580.64 -36478580.45 0.0061 0.0027  
 Mercury -104586-05-01 22:04 J -36478492.75 -36478492.58 -36478492.38 0.0061 0.0020  
 Mercury -104586-07-28 23:45 J -36478404.70 -36478404.51 -36478404.31 0.0061 0.0012  
 Mercury -104586-10-25 01:11 J -36478316.64 -36478316.45 -36478316.24 0.0061 0.0005  
 Mercury -104585-01-21 02:52 J -36478228.58 -36478228.38 -36478228.18 0.0061 0.0003  
 Mercury -104585-04-18 04:04 J -36478140.51 -36478140.33 -36478140.12 0.0061 0.0011  
 Mercury -104585-07-15 05:45 J -36478052.44 -36478052.26 -36478052.07 0.0061 0.0018  
 Mercury -104585-10-11 06:57 J -36477964.37 -36477964.21 -36477964.01 0.0061 0.0026  
 Mercury -104584-01-07 08:38 J -36477876.29 -36477876.14 -36477875.96 0.0061 0.0033  
 Mercury -104584-04-05 09:50 J -36477788.21 -36477788.09 -36477787.92 0.0061 0.0042  
 Mercury -104584-07-02 11:45 J -36477700.12 -36477700.01 -36477699.88 0.0061 0.0049  
 Mercury -104584-09-28 12:57 J -36477612.01 -36477611.96 -36477611.86 0.0061 0.0057  
 Venus -104577-04-20 20:09 J -36475215.83 -36475215.66 -36475215.46 0.0063 0.0038  
 Venus -104577-12-02 01:11 J -36474990.68 -36474990.45 -36474990.22 0.0063 0.0001  
 Venus -104576-07-15 05:16 J -36474765.44 -36474765.28 -36474765.08 0.0064 0.0040

Mars -104574-12-26 15:06 J -36473871.17 -36473870.87 -36473870.57 0.0065 0.0010  
 Moon -104570-03-02 23:59 J -36472708.75 -36472708.50 -36472708.24 0.0066 0.0011  
 Earth -104570-03-03 00:42 J -36472708.72 -36472708.47 -36472708.19 0.0066 0.0009 \*  
 Mercury -104494-06-14 09:50 J -36444846.12 -36444846.09 -36444846.03 0.0085 0.0079  
 Mercury -104494-09-10 11:16 J -36444758.11 -36444758.03 -36444757.94 0.0085 0.0065  
 Mercury -104494-12-07 12:28 J -36444670.08 -36444669.98 -36444669.87 0.0085 0.0051  
 Mercury -104493-03-04 13:54 J -36444582.04 -36444581.92 -36444581.80 0.0084 0.0038  
 Mercury -104493-05-31 15:06 J -36444493.99 -36444493.87 -36444493.74 0.0084 0.0024  
 Mercury -104493-08-27 16:18 J -36444405.95 -36444405.82 -36444405.68 0.0084 0.0011  
 Mercury -104493-11-23 17:45 J -36444317.90 -36444317.76 -36444317.63 0.0084 0.0004  
 Mercury -104492-02-19 18:42 J -36444229.84 -36444229.72 -36444229.58 0.0084 0.0017  
 Mercury -104492-05-18 19:54 J -36444141.78 -36444141.67 -36444141.54 0.0084 0.0030  
 Mercury -104492-08-14 21:21 J -36444053.72 -36444053.61 -36444053.50 0.0084 0.0043  
 Mercury -104492-11-10 22:18 J -36443965.66 -36443965.57 -36443965.46 0.0084 0.0057  
 Mercury -104491-02-06 23:30 J -36443877.58 -36443877.52 -36443877.44 0.0083 0.0070  
 Mercury -104491-05-06 00:42 J -36443789.47 -36443789.47 -36443789.44 0.0083 0.0083  
 Venus -104488-10-26 05:59 J -36442520.46 -36442520.25 -36442520.03 0.0081 0.0006  
 Venus -104487-06-08 15:50 J -36442294.94 -36442294.84 -36442294.73 0.0081 0.0071  
 Earth -104484-08-31 22:47 J -36441114.74 -36441114.55 -36441114.35 0.0079 0.0049  
 Moon -104484-09-01 00:42 J -36441114.65 -36441114.47 -36441114.25 0.0079 0.0046 \*  
 Moon -104483-09-02 19:40 J -36440747.72 -36440747.68 -36440747.62 0.0079 0.0077  
 Mercury -104342-10-16 03:50 J -36389204.36 -36389204.34 -36389204.30 0.0060 0.0059  
 Mercury -104341-01-12 05:02 J -36389116.36 -36389116.29 -36389116.17 0.0060 0.0053  
 Mercury -104341-04-09 06:28 J -36389028.34 -36389028.23 -36389028.08 0.0060 0.0045  
 Mercury -104341-07-06 08:23 J -36388940.30 -36388940.15 -36388939.99 0.0060 0.0038  
 Mercury -104341-10-02 09:35 J -36388852.25 -36388852.10 -36388851.91 0.0060 0.0031  
 Mercury -104341-12-29 11:30 J -36388764.20 -36388764.02 -36388763.84 0.0061 0.0023  
 Mercury -104340-03-27 12:42 J -36388676.15 -36388675.97 -36388675.77 0.0061 0.0016  
 Mercury -104340-06-23 14:23 J -36388588.09 -36388587.90 -36388587.70 0.0061 0.0008  
 Mercury -104340-09-19 16:04 J -36388500.03 -36388499.83 -36388499.64 0.0061 0.0001

Mercury -104340-12-16 17:30 J -36388411.97 -36388411.77 -36388411.57 0.0061 0.0007

Mercury -104339-03-14 18:57 J -36388323.90 -36388323.71 -36388323.52 0.0061 0.0014

Mercury -104339-06-10 20:09 J -36388235.83 -36388235.66 -36388235.46 0.0061 0.0022

Mercury -104339-09-06 21:50 J -36388147.75 -36388147.59 -36388147.41 0.0061 0.0029

Mercury -104339-12-03 23:02 J -36388059.67 -36388059.54 -36388059.36 0.0061 0.0037

Mercury -104338-03-02 00:57 J -36387971.59 -36387971.46 -36387971.32 0.0061 0.0044

Mercury -104338-05-29 02:09 J -36387883.49 -36387883.41 -36387883.29 0.0061 0.0052

Mercury -104338-08-25 03:21 J -36387795.37 -36387795.36 -36387795.29 0.0061 0.0061

Venus -104332-10-07 04:04 J -36385560.43 -36385560.33 -36385560.18 0.0063 0.0052

Venus -104331-05-20 08:52 J -36385335.34 -36385335.13 -36385334.90 0.0063 0.0014

Venus -104331-12-31 13:26 J -36385110.14 -36385109.94 -36385109.71 0.0064 0.0025

Venus -104330-08-13 18:14 J -36384884.76 -36384884.74 -36384884.71 0.0064 0.0063

Earth -104324-03-04 08:09 J -36382855.43 -36382855.16 -36382854.88 0.0066 0.0001

Moon -104324-03-04 11:45 J -36382855.28 -36382855.01 -36382854.73 0.0066 0.0004 \*

Mercury -104248-05-10 02:09 J -36355029.47 -36355029.41 -36355029.34 0.0085 0.0073

Mercury -104248-08-06 03:35 J -36354941.45 -36354941.35 -36354941.26 0.0085 0.0059

Mercury -104248-11-02 04:33 J -36354853.41 -36354853.31 -36354853.19 0.0085 0.0046

Mercury -104247-01-29 05:59 J -36354765.37 -36354765.25 -36354765.12 0.0084 0.0032

Mercury -104247-04-27 07:11 J -36354677.32 -36354677.20 -36354677.07 0.0084 0.0018

Mercury -104247-07-24 08:38 J -36354589.28 -36354589.14 -36354589.01 0.0084 0.0005

Mercury -104247-10-20 09:50 J -36354501.22 -36354501.09 -36354500.96 0.0084 0.0009

Mercury -104246-01-16 11:02 J -36354413.17 -36354413.04 -36354412.91 0.0084 0.0022

Mercury -104246-04-14 11:59 J -36354325.11 -36354325.00 -36354324.87 0.0084 0.0036

Mercury -104246-07-11 13:11 J -36354237.05 -36354236.95 -36354236.83 0.0084 0.0049

Mercury -104246-10-07 14:23 J -36354148.98 -36354148.90 -36354148.80 0.0084 0.0062

Mercury -104245-01-03 15:50 J -36354060.89 -36354060.84 -36354060.78 0.0083 0.0075

Venus -104242-04-13 11:02 J -36352865.21 -36352865.04 -36352864.84 0.0082 0.0040

Venus -104242-11-24 20:52 J -36352639.81 -36352639.63 -36352639.43 0.0081 0.0037

Mars -104240-10-10 14:09 J -36351954.16 -36351953.91 -36351953.61 0.0080 0.0046

Earth -104238-09-03 10:04 J -36351261.31 -36351261.08 -36351260.85 0.0079 0.0032

Moon -104238-09-03 12:14 J -36351261.21 -36351260.99 -36351260.74 0.0079 0.0028 \*  
 Mercury -104096-09-10 18:42 J -36299387.78 -36299387.72 -36299387.61 0.0060 0.0054  
 Mercury -104096-12-07 20:38 J -36299299.76 -36299299.64 -36299299.51 0.0060 0.0047  
 Mercury -104095-03-05 21:50 J -36299211.72 -36299211.59 -36299211.42 0.0060 0.0040  
 Mercury -104095-06-01 23:45 J -36299123.68 -36299123.51 -36299123.34 0.0060 0.0032  
 Mercury -104095-08-29 00:57 J -36299035.63 -36299035.46 -36299035.27 0.0061 0.0025  
 Mercury -104095-11-25 02:23 J -36298947.57 -36298947.40 -36298947.20 0.0061 0.0018  
 Mercury -104094-02-21 04:18 J -36298859.52 -36298859.32 -36298859.13 0.0061 0.0010  
 Mercury -104094-05-20 05:45 J -36298771.46 -36298771.26 -36298771.06 0.0061 0.0002  
 Mercury -104094-08-16 07:11 J -36298683.39 -36298683.20 -36298683.00 0.0061 0.0005  
 Mercury -104094-11-12 08:38 J -36298595.33 -36298595.14 -36298594.94 0.0061 0.0013  
 Mercury -104093-02-08 10:04 J -36298507.26 -36298507.08 -36298506.88 0.0061 0.0020  
 Mercury -104093-05-06 11:16 J -36298419.18 -36298419.03 -36298418.83 0.0061 0.0028  
 Mercury -104093-08-02 12:57 J -36298331.10 -36298330.96 -36298330.78 0.0061 0.0036  
 Mercury -104093-10-29 14:23 J -36298243.02 -36298242.90 -36298242.74 0.0061 0.0043  
 Mercury -104092-01-25 16:04 J -36298154.93 -36298154.83 -36298154.71 0.0061 0.0051  
 Mercury -104092-04-23 17:16 J -36298066.81 -36298066.78 -36298066.69 0.0061 0.0059  
 Venus -104086-03-25 14:23 J -36295904.94 -36295904.90 -36295904.85 0.0063 0.0062  
 Venus -104086-11-05 18:57 J -36295679.92 -36295679.71 -36295679.50 0.0063 0.0024  
 Venus -104085-06-17 23:02 J -36295454.75 -36295454.54 -36295454.30 0.0064 0.0015  
 Venus -104084-01-29 03:50 J -36295229.46 -36295229.34 -36295229.21 0.0064 0.0053  
 Moon -104079-03-04 23:45 J -36293368.54 -36293368.51 -36293368.41 0.0066 0.0064  
 Moon -104078-03-06 16:47 J -36293002.07 -36293001.80 -36293001.52 0.0066 0.0011  
 Earth -104078-03-06 17:59 J -36293002.00 -36293001.75 -36293001.47 0.0066 0.0015 \*  
 Mercury -104002-01-07 17:45 J -36265300.81 -36265300.76 -36265300.69 0.0085 0.0075  
 Mercury -104002-04-05 19:11 J -36265212.79 -36265212.70 -36265212.60 0.0085 0.0061  
 Mercury -104002-07-02 20:23 J -36265124.75 -36265124.65 -36265124.53 0.0085 0.0047  
 Mercury -104002-09-28 21:35 J -36265036.71 -36265036.60 -36265036.47 0.0084 0.0034  
 Mercury -104002-12-25 23:02 J -36264948.67 -36264948.54 -36264948.41 0.0084 0.0020  
 Mercury -104001-03-23 00:14 J -36264860.62 -36264860.49 -36264860.35 0.0084 0.0007



Mercury -104001-06-19 01:26 J -36264772.57 -36264772.44 -36264772.30 0.0084 0.0008  
 Mercury -104001-09-15 02:52 J -36264684.51 -36264684.38 -36264684.26 0.0084 0.0020  
 Mercury -104001-12-12 03:50 J -36264596.45 -36264596.34 -36264596.21 0.0084 0.0034

# 104TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 104th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-104000-03-10 05:02 J	-36264508.39	-36264508.29	-36264508.17	0.0084	0.0047		
Mercury	-104000-06-06 06:14 J	-36264420.32	-36264420.24	-36264420.14	0.0084	0.0060		
Mercury	-104000-09-02 07:40 J	-36264332.24	-36264332.18	-36264332.12	0.0083	0.0073		
Venus	-103997-09-28 19:26 J	-36263209.81	-36263209.69	-36263209.54	0.0082	0.0063		
Venus	-103996-05-12 05:30 J	-36262984.48	-36262984.27	-36262984.05	0.0081	0.0014		
Moon	-103992-09-04 22:33 J	-36261407.81	-36261407.56	-36261407.31	0.0079	0.0002		
Earth	-103992-09-05 01:26 J	-36261407.69	-36261407.44	-36261407.20	0.0079	0.0002	*	
Mercury	-103850-05-11 08:38 J	-36209659.20	-36209659.14	-36209659.07	0.0060	0.0057		
Mercury	-103850-08-07 09:50 J	-36209571.19	-36209571.09	-36209570.96	0.0060	0.0050		
Mercury	-103850-11-03 11:16 J	-36209483.15	-36209483.03	-36209482.87	0.0060	0.0042		
Mercury	-103849-01-30 13:11 J	-36209395.11	-36209394.95	-36209394.79	0.0060	0.0035		
Mercury	-103849-04-27 14:23 J	-36209307.07	-36209306.90	-36209306.72	0.0061	0.0028		
Mercury	-103849-07-24 15:50 J	-36209219.01	-36209218.84	-36209218.64	0.0061	0.0021		

Mercury -103849-10-20 17:30 J -36209130.96 -36209130.77 -36209130.57 0.0061 0.0013  
 Mercury -103848-01-16 18:57 J -36209042.90 -36209042.71 -36209042.51 0.0061 0.0006  
 Mercury -103848-04-14 20:38 J -36208954.84 -36208954.64 -36208954.44 0.0061 0.0002  
 Mercury -103848-07-11 21:50 J -36208866.77 -36208866.59 -36208866.38 0.0061 0.0010  
 Mercury -103848-10-07 23:30 J -36208778.71 -36208778.52 -36208778.33 0.0061 0.0017  
 Mercury -103847-01-04 00:42 J -36208690.63 -36208690.47 -36208690.27 0.0061 0.0025  
 Mercury -103847-04-02 02:23 J -36208602.56 -36208602.40 -36208602.22 0.0061 0.0032  
 Mercury -103847-06-29 03:35 J -36208514.48 -36208514.35 -36208514.18 0.0061 0.0040  
 Mercury -103847-09-25 05:16 J -36208426.39 -36208426.28 -36208426.14 0.0061 0.0048  
 Mercury -103847-12-22 06:28 J -36208338.28 -36208338.23 -36208338.11 0.0061 0.0056  
 Venus -103840-04-23 03:21 J -36206024.53 -36206024.36 -36206024.16 0.0063 0.0037  
 Venus -103840-12-04 08:23 J -36205799.38 -36205799.15 -36205798.92 0.0063 0.0002  
 Venus -103839-07-17 12:42 J -36205574.14 -36205573.97 -36205573.79 0.0064 0.0040  
 Mars -103836-04-12 16:47 J -36204574.10 -36204573.80 -36204573.49 0.0065 0.0003  
 Earth -103833-03-06 09:06 J -36203515.23 -36203515.12 -36203514.95 0.0066 0.0056  
 Moon -103833-03-06 12:28 J -36203515.10 -36203514.98 -36203514.78 0.0066 0.0053 \*  
 Moon -103832-03-07 23:02 J -36203148.78 -36203148.54 -36203148.28 0.0066 0.0022  
 Earth -103832-03-08 02:09 J -36203148.64 -36203148.41 -36203148.14 0.0066 0.0026 \*  
 Mercury -103757-09-06 08:52 J -36175572.16 -36175572.13 -36175572.08 0.0085 0.0081  
 Mercury -103757-12-03 10:18 J -36175484.15 -36175484.07 -36175483.99 0.0085 0.0067  
 Mercury -103756-03-01 11:16 J -36175396.12 -36175396.03 -36175395.91 0.0085 0.0054  
 Mercury -103756-05-28 12:42 J -36175308.08 -36175307.97 -36175307.85 0.0084 0.0040  
 Mercury -103756-08-24 13:54 J -36175220.04 -36175219.92 -36175219.78 0.0084 0.0027  
 Mercury -103756-11-20 15:21 J -36175131.99 -36175131.86 -36175131.73 0.0084 0.0013  
 Mercury -103755-02-16 16:33 J -36175043.94 -36175043.81 -36175043.67 0.0084 0.0002  
 Mercury -103755-05-15 17:59 J -36174955.88 -36174955.75 -36174955.62 0.0084 0.0014  
 Mercury -103755-08-11 18:57 J -36174867.83 -36174867.71 -36174867.58 0.0084 0.0028  
 Mercury -103755-11-07 20:09 J -36174779.77 -36174779.66 -36174779.54 0.0084 0.0041  
 Mercury -103754-02-03 21:21 J -36174691.70 -36174691.61 -36174691.50 0.0084 0.0054  
 Mercury -103754-05-02 22:33 J -36174603.63 -36174603.56 -36174603.47 0.0083 0.0067

Mercury -103754-07-29 23:59 J -36174515.53 -36174515.50 -36174515.46 0.0083 0.0080

Venus -103751-10-28 11:59 J -36173329.21 -36173329.00 -36173328.79 0.0082 0.0018

Venus -103750-06-10 21:21 J -36173103.74 -36173103.61 -36173103.44 0.0081 0.0058

Moon -103746-09-07 12:14 J -36171554.22 -36171553.99 -36171553.76 0.0079 0.0022

Earth -103746-09-07 12:42 J -36171554.19 -36171553.97 -36171553.71 0.0079 0.0019 \*

Mercury -103604-01-07 21:50 J -36119930.61 -36119930.59 -36119930.51 0.0060 0.0059

Mercury -103604-04-05 23:59 J -36119842.60 -36119842.50 -36119842.39 0.0060 0.0051

Mercury -103604-07-03 01:11 J -36119754.57 -36119754.45 -36119754.30 0.0060 0.0044

Mercury -103604-09-29 02:38 J -36119666.53 -36119666.39 -36119666.21 0.0060 0.0037

Mercury -103604-12-26 04:33 J -36119578.48 -36119578.31 -36119578.14 0.0061 0.0029

Mercury -103603-03-24 05:45 J -36119490.43 -36119490.26 -36119490.06 0.0061 0.0022

Mercury -103603-06-20 07:11 J -36119402.38 -36119402.20 -36119401.99 0.0061 0.0015

Mercury -103603-09-16 09:06 J -36119314.32 -36119314.12 -36119313.93 0.0061 0.0007

Mercury -103603-12-13 10:33 J -36119226.26 -36119226.06 -36119225.86 0.0061 0.0001

Mercury -103602-03-11 11:59 J -36119138.19 -36119138.00 -36119137.80 0.0061 0.0008

Mercury -103602-06-07 13:11 J -36119050.12 -36119049.95 -36119049.74 0.0061 0.0016

Mercury -103602-09-03 14:52 J -36118962.05 -36118961.88 -36118961.69 0.0061 0.0023

Mercury -103602-11-30 16:04 J -36118873.98 -36118873.83 -36118873.64 0.0061 0.0031

Mercury -103601-02-26 17:45 J -36118785.90 -36118785.76 -36118785.59 0.0061 0.0038

Mercury -103601-05-24 18:57 J -36118697.81 -36118697.71 -36118697.55 0.0061 0.0047

Mercury -103601-08-20 20:52 J -36118609.71 -36118609.63 -36118609.52 0.0061 0.0053

Mercury -103601-11-16 22:18 J -36118521.57 -36118521.57 -36118521.54 0.0061 0.0061

Venus -103595-10-09 13:26 J -36116369.09 -36116368.94 -36116368.77 0.0063 0.0046

Venus -103594-05-22 17:59 J -36116143.97 -36116143.75 -36116143.52 0.0063 0.0008

Venus -103593-01-02 22:18 J -36115918.75 -36115918.57 -36115918.35 0.0064 0.0031

Moon -103587-03-08 18:28 J -36113661.93 -36113661.73 -36113661.47 0.0066 0.0037

Earth -103587-03-08 19:40 J -36113661.86 -36113661.68 -36113661.43 0.0066 0.0040 \*

Earth -103586-03-10 12:28 J -36113295.16 -36113294.98 -36113294.75 0.0066 0.0043

Moon -103586-03-10 15:21 J -36113295.07 -36113294.86 -36113294.65 0.0066 0.0040 \*

Mercury -103511-05-07 00:42 J -36085843.49 -36085843.47 -36085843.43 0.0085 0.0082

Mercury -103511-08-03 02:09 J -36085755.48 -36085755.41 -36085755.33 0.0085 0.0068  
 Mercury -103511-10-30 03:06 J -36085667.45 -36085667.37 -36085667.25 0.0085 0.0055  
 Mercury -103510-01-26 04:33 J -36085579.42 -36085579.31 -36085579.19 0.0084 0.0041  
 Mercury -103510-04-24 05:45 J -36085491.38 -36085491.26 -36085491.12 0.0084 0.0028  
 Mercury -103510-07-21 07:11 J -36085403.33 -36085403.20 -36085403.07 0.0084 0.0014  
 Mercury -103510-10-17 08:23 J -36085315.28 -36085315.15 -36085315.01 0.0084 0.0002  
 Mercury -103509-01-13 09:35 J -36085227.23 -36085227.10 -36085226.96 0.0084 0.0014  
 Mercury -103509-04-10 10:47 J -36085139.17 -36085139.05 -36085138.92 0.0084 0.0027  
 Mercury -103509-07-07 11:59 J -36085051.11 -36085051.00 -36085050.88 0.0084 0.0040  
 Mercury -103509-10-03 13:11 J -36084963.04 -36084962.95 -36084962.84 0.0084 0.0053  
 Mercury -103509-12-30 14:23 J -36084874.97 -36084874.90 -36084874.81 0.0083 0.0066  
 Mercury -103508-03-28 15:35 J -36084786.88 -36084786.85 -36084786.80 0.0083 0.0079  
 Venus -103505-04-14 20:09 J -36083673.83 -36083673.66 -36083673.46 0.0082 0.0039  
 Venus -103505-11-26 05:59 J -36083448.42 -36083448.25 -36083448.04 0.0081 0.0038  
 Mars -103502-01-25 06:14 J -36082658.47 -36082658.24 -36082657.98 0.0080 0.0053  
 Earth -103500-09-09 04:47 J -36081700.49 -36081700.30 -36081700.10 0.0079 0.0050  
 Moon -103500-09-09 07:40 J -36081700.33 -36081700.18 -36081699.97 0.0079 0.0055 \*  
 Mercury -103359-12-04 12:42 J -36030114.03 -36030113.97 -36030113.86 0.0060 0.0054  
 Mercury -103358-03-02 14:38 J -36030026.01 -36030025.89 -36030025.76 0.0060 0.0047  
 Mercury -103358-05-29 15:50 J -36029937.97 -36029937.84 -36029937.68 0.0060 0.0040  
 Mercury -103358-08-25 17:16 J -36029849.93 -36029849.78 -36029849.60 0.0060 0.0033  
 Mercury -103358-11-21 19:11 J -36029761.88 -36029761.70 -36029761.52 0.0061 0.0025  
 Mercury -103357-02-17 20:23 J -36029673.83 -36029673.65 -36029673.45 0.0061 0.0018  
 Mercury -103357-05-15 22:04 J -36029585.77 -36029585.58 -36029585.38 0.0061 0.0010  
 Mercury -103357-08-11 23:45 J -36029497.71 -36029497.51 -36029497.31 0.0061 0.0003  
 Mercury -103357-11-08 01:11 J -36029409.65 -36029409.45 -36029409.25 0.0061 0.0005  
 Mercury -103356-02-04 02:38 J -36029321.58 -36029321.39 -36029321.19 0.0061 0.0012  
 Mercury -103356-05-03 03:50 J -36029233.51 -36029233.34 -36029233.14 0.0061 0.0020  
 Mercury -103356-07-30 05:30 J -36029145.44 -36029145.27 -36029145.08 0.0061 0.0027  
 Mercury -103356-10-26 07:11 J -36029057.36 -36029057.20 -36029057.03 0.0061 0.0034

Mercury -103355-01-22 08:23 J -36028969.27 -36028969.15 -36028968.99 0.0061 0.0042

Mercury -103355-04-20 10:18 J -36028881.18 -36028881.07 -36028880.95 0.0061 0.0050

Mercury -103355-07-17 11:30 J -36028793.07 -36028793.02 -36028792.94 0.0061 0.0057

Venus -103349-03-26 21:50 J -36026713.65 -36026713.59 -36026713.51 0.0063 0.0059

Venus -103349-11-07 02:09 J -36026488.61 -36026488.41 -36026488.18 0.0063 0.0022

Venus -103348-06-20 06:57 J -36026263.43 -36026263.21 -36026262.99 0.0063 0.0016

Venus -103347-01-31 10:33 J -36026038.14 -36026038.06 -36026037.91 0.0064 0.0055

Moon -103341-03-10 00:28 J -36023808.72 -36023808.48 -36023808.24 0.0066 0.0027

Earth -103341-03-10 03:06 J -36023808.58 -36023808.37 -36023808.10 0.0066 0.0031 \*

Earth -103340-03-11 20:09 J -36023441.80 -36023441.66 -36023441.47 0.0066 0.0053

Moon -103340-03-11 22:18 J -36023441.74 -36023441.57 -36023441.37 0.0066 0.0050 \*

Mercury -103265-04-01 17:02 J -35996026.84 -35996026.79 -35996026.72 0.0085 0.0075

Mercury -103265-06-28 18:28 J -35995938.82 -35995938.73 -35995938.64 0.0085 0.0061

Mercury -103265-09-24 19:40 J -35995850.79 -35995850.68 -35995850.57 0.0085 0.0048

Mercury -103265-12-21 20:52 J -35995762.75 -35995762.63 -35995762.50 0.0084 0.0034

Mercury -103264-03-19 22:18 J -35995674.70 -35995674.57 -35995674.44 0.0084 0.0021

Mercury -103264-06-15 23:30 J -35995586.65 -35995586.52 -35995586.39 0.0084 0.0007

Mercury -103264-09-12 00:42 J -35995498.60 -35995498.47 -35995498.34 0.0084 0.0006

Mercury -103264-12-09 01:54 J -35995410.55 -35995410.42 -35995410.29 0.0084 0.0019

Mercury -103263-03-07 03:06 J -35995322.49 -35995322.37 -35995322.25 0.0084 0.0032

Mercury -103263-06-03 04:18 J -35995234.43 -35995234.32 -35995234.21 0.0084 0.0046

Mercury -103263-08-30 05:30 J -35995146.36 -35995146.27 -35995146.17 0.0084 0.0059

Mercury -103263-11-26 06:42 J -35995058.28 -35995058.22 -35995058.15 0.0083 0.0071

Venus -103260-10-01 01:40 J -35994018.51 -35994018.43 -35994018.32 0.0082 0.0073

Venus -103259-05-14 11:59 J -35993793.21 -35993793.00 -35993792.78 0.0081 0.0004

Venus -103259-12-25 21:35 J -35993567.63 -35993567.60 -35993567.55 0.0081 0.0079

Moon -103255-09-09 14:23 J -35992214.02 -35992213.90 -35992213.75 0.0079 0.0065

Earth -103255-09-09 16:04 J -35992213.97 -35992213.83 -35992213.66 0.0079 0.0061 \*

Earth -103254-09-11 16:04 J -35991846.94 -35991846.83 -35991846.69 0.0078 0.0068

Moon -103254-09-11 15:50 J -35991846.92 -35991846.84 -35991846.71 0.0078 0.0072 \*

Mercury -103113-08-03 01:40 J -35940385.46 -35940385.43 -35940385.36 0.0060 0.0058

Mercury -103113-10-30 03:06 J -35940297.45 -35940297.37 -35940297.24 0.0060 0.0051

Mercury -103112-01-26 05:01 J -35940209.42 -35940209.29 -35940209.15 0.0060 0.0044

Mercury -103112-04-24 06:13 J -35940121.38 -35940121.24 -35940121.07 0.0060 0.0037

Mercury -103112-07-21 07:40 J -35940033.34 -35940033.18 -35940032.99 0.0061 0.0030

Mercury -103112-10-17 09:21 J -35939945.28 -35939945.11 -35939944.92 0.0061 0.0022

Mercury -103111-01-13 10:47 J -35939857.23 -35939857.05 -35939856.85 0.0061 0.0015

Mercury -103111-04-11 12:28 J -35939769.17 -35939768.98 -35939768.78 0.0061 0.0007

Mercury -103111-07-08 14:09 J -35939681.11 -35939680.91 -35939680.72 0.0061 0.0001

Mercury -103111-10-04 15:21 J -35939593.05 -35939592.86 -35939592.65 0.0061 0.0008

Mercury -103111-12-31 17:01 J -35939504.98 -35939504.79 -35939504.60 0.0061 0.0015

Mercury -103110-03-29 18:13 J -35939416.91 -35939416.74 -35939416.54 0.0061 0.0023

Mercury -103110-06-25 19:54 J -35939328.83 -35939328.67 -35939328.49 0.0061 0.0030

Mercury -103110-09-21 21:06 J -35939240.75 -35939240.62 -35939240.44 0.0061 0.0038

Mercury -103110-12-18 22:47 J -35939152.66 -35939152.55 -35939152.40 0.0061 0.0046

Mercury -103109-03-16 00:13 J -35939064.56 -35939064.49 -35939064.37 0.0061 0.0053

Mercury -103109-06-12 01:54 J -35938976.43 -35938976.42 -35938976.37 0.0061 0.0061

Venus -103103-04-25 10:04 J -35936833.24 -35936833.08 -35936832.87 0.0063 0.0037

Venus -103103-12-06 15:06 J -35936608.10 -35936607.87 -35936607.64 0.0063 0.0001

Venus -103102-07-19 19:11 J -35936382.86 -35936382.70 -35936382.50 0.0064 0.0039

Mars -103099-07-29 15:06 J -35935277.14 -35935276.87 -35935276.56 0.0065 0.0021

Earth -103095-03-12 10:33 J -35933955.29 -35933955.06 -35933954.78 0.0066 0.0022

Moon -103095-03-12 12:42 J -35933955.20 -35933954.97 -35933954.70 0.0066 0.0019 \*

Moon -103094-03-13 23:45 J -35933588.60 -35933588.51 -35933588.36 0.0066 0.0060

Earth -103094-03-14 03:35 J -35933588.43 -35933588.35 -35933588.23 0.0066 0.0062 \*

Mercury -103020-11-30 07:54 J -35906298.19 -35906298.17 -35906298.11 0.0085 0.0081

Mercury -103019-02-26 09:21 J -35906210.18 -35906210.11 -35906210.02 0.0085 0.0067

Mercury -103019-05-25 10:33 J -35906122.15 -35906122.06 -35906121.94 0.0085 0.0054

Mercury -103019-08-21 11:59 J -35906034.11 -35906034.00 -35906033.88 0.0084 0.0040

Mercury -103019-11-17 13:11 J -35905946.07 -35905945.95 -35905945.82 0.0084 0.0027

Mercury	-103018-02-13 14:37 J	-35905858.02	-35905857.89	-35905857.76	0.0084	0.0013
Mercury	-103018-05-12 15:49 J	-35905769.97	-35905769.84	-35905769.71	0.0084	0.0001
Mercury	-103018-08-08 17:01 J	-35905681.92	-35905681.79	-35905681.66	0.0084	0.0014
Mercury	-103018-11-04 18:13 J	-35905593.86	-35905593.74	-35905593.61	0.0084	0.0027
Mercury	-103017-01-31 19:25 J	-35905505.80	-35905505.69	-35905505.57	0.0084	0.0040
Mercury	-103017-04-28 20:52 J	-35905417.74	-35905417.63	-35905417.53	0.0084	0.0053
Mercury	-103017-07-25 22:04 J	-35905329.66	-35905329.58	-35905329.50	0.0083	0.0066
Mercury	-103017-10-21 23:16 J	-35905241.57	-35905241.53	-35905241.49	0.0083	0.0079
Venus	-103014-10-30 17:59 J	-35904137.93	-35904137.75	-35904137.53	0.0082	0.0028
Venus	-103013-06-12 04:04 J	-35903912.49	-35903912.33	-35903912.15	0.0081	0.0049
Earth	-103009-09-11 03:49 J	-35902360.54	-35902360.34	-35902360.11	0.0079	0.0039
Moon	-103009-09-11 06:57 J	-35902360.40	-35902360.21	-35902359.99	0.0079	0.0043 *

# 103RD MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 103rd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-102867-06-29 15:06 J	-35850568.90	-35850568.87	-35850568.80	0.0060	0.0058		
Mercury	-102867-09-25 16:33 J	-35850480.89	-35850480.81	-35850480.68	0.0060	0.0051		
Mercury	-102867-12-22 18:28 J	-35850392.86	-35850392.73	-35850392.59	0.0060	0.0044		
Mercury	-102866-03-20 19:40 J	-35850304.82	-35850304.68	-35850304.51	0.0060	0.0037		

Mercury -102866-06-16 21:06 J -35850216.77 -35850216.62 -35850216.43 0.0060 0.0030

Mercury -102866-09-12 23:01 J -35850128.72 -35850128.54 -35850128.36 0.0061 0.0022

Mercury -102866-12-10 00:28 J -35850040.67 -35850040.48 -35850040.29 0.0061 0.0015

Mercury -102865-03-07 01:54 J -35849952.61 -35849952.42 -35849952.22 0.0061 0.0008

Mercury -102865-06-03 03:35 J -35849864.55 -35849864.35 -35849864.16 0.0061 0.0001

Mercury -102865-08-30 04:47 J -35849776.49 -35849776.30 -35849776.09 0.0061 0.0008

Mercury -102865-11-26 06:13 J -35849688.42 -35849688.24 -35849688.04 0.0061 0.0015

Mercury -102864-02-22 07:54 J -35849600.35 -35849600.17 -35849599.98 0.0061 0.0022

Mercury -102864-05-21 09:06 J -35849512.27 -35849512.12 -35849511.93 0.0061 0.0030

Mercury -102864-08-17 10:47 J -35849424.19 -35849424.05 -35849423.88 0.0061 0.0037

Mercury -102864-11-13 11:59 J -35849336.11 -35849336.00 -35849335.84 0.0061 0.0046

Mercury -102863-02-09 13:54 J -35849248.01 -35849247.92 -35849247.81 0.0061 0.0053

Mercury -102863-05-08 15:06 J -35849159.88 -35849159.87 -35849159.81 0.0061 0.0060

Venus -102858-10-11 15:49 J -35847177.89 -35847177.84 -35847177.74 0.0063 0.0059

Venus -102857-05-23 20:23 J -35846952.85 -35846952.65 -35846952.42 0.0063 0.0022

Venus -102856-01-04 01:11 J -35846727.66 -35846727.45 -35846727.22 0.0063 0.0016

Venus -102856-08-17 05:30 J -35846502.37 -35846502.27 -35846502.13 0.0064 0.0054

Mars -102853-12-20 06:13 J -35845281.51 -35845281.24 -35845280.96 0.0065 0.0027

Earth -102849-03-13 13:11 J -35844102.20 -35844101.95 -35844101.69 0.0066 0.0023

Moon -102849-03-13 15:21 J -35844102.10 -35844101.86 -35844101.58 0.0066 0.0021 \*

Moon -102848-03-15 04:47 J -35843735.39 -35843735.30 -35843735.15 0.0066 0.0059

Earth -102848-03-15 05:59 J -35843735.36 -35843735.25 -35843735.13 0.0066 0.0060 \*

Mercury -102774-10-26 23:01 J -35816481.56 -35816481.54 -35816481.52 0.0085 0.0083

Mercury -102773-01-22 23:59 J -35816393.56 -35816393.50 -35816393.41 0.0085 0.0070

Mercury -102773-04-20 01:25 J -35816305.53 -35816305.44 -35816305.34 0.0085 0.0056

Mercury -102773-07-17 02:37 J -35816217.49 -35816217.39 -35816217.27 0.0084 0.0043

Mercury -102773-10-13 03:49 J -35816129.45 -35816129.34 -35816129.20 0.0084 0.0030

Mercury -102772-01-09 05:16 J -35816041.41 -35816041.28 -35816041.15 0.0084 0.0016

Mercury -102772-04-07 06:28 J -35815953.36 -35815953.23 -35815953.09 0.0084 0.0004

Mercury -102772-07-04 07:54 J -35815865.30 -35815865.17 -35815865.04 0.0084 0.0011



Mercury -102772-09-30 09:06 J -35815777.25 -35815777.12 -35815777.00 0.0084 0.0024

Mercury -102772-12-27 10:04 J -35815689.19 -35815689.08 -35815688.95 0.0084 0.0038

Mercury -102771-03-25 11:16 J -35815601.12 -35815601.03 -35815600.91 0.0084 0.0051

Mercury -102771-06-21 12:28 J -35815513.05 -35815512.98 -35815512.88 0.0083 0.0063

Mercury -102771-09-17 13:40 J -35815424.97 -35815424.93 -35815424.87 0.0083 0.0076

Venus -102768-04-16 19:11 J -35814482.70 -35814482.70 -35814482.69 0.0082 0.0082

Venus -102768-11-28 05:16 J -35814257.49 -35814257.28 -35814257.06 0.0082 0.0005

Venus -102767-07-11 14:52 J -35814031.97 -35814031.88 -35814031.76 0.0081 0.0071

Mars -102765-05-09 08:52 J -35813364.43 -35813364.13 -35813363.81 0.0080 0.0029

Moon -102763-09-13 08:09 J -35812507.36 -35812507.16 -35812506.93 0.0079 0.0044

Earth -102763-09-13 08:23 J -35812507.35 -35812507.15 -35812506.92 0.0079 0.0041 \*

Mercury -102621-05-25 04:47 J -35760752.34 -35760752.30 -35760752.26 0.0060 0.0059

Mercury -102621-08-21 05:59 J -35760664.34 -35760664.25 -35760664.14 0.0060 0.0052

Mercury -102621-11-17 07:25 J -35760576.31 -35760576.19 -35760576.04 0.0060 0.0045

Mercury -102620-02-13 08:52 J -35760488.27 -35760488.13 -35760487.96 0.0060 0.0038

Mercury -102620-05-12 10:47 J -35760400.22 -35760400.05 -35760399.88 0.0060 0.0030

Mercury -102620-08-08 11:59 J -35760312.17 -35760312.00 -35760311.80 0.0061 0.0023

Mercury -102620-11-04 13:25 J -35760224.12 -35760223.94 -35760223.73 0.0061 0.0016

Mercury -102619-01-31 15:06 J -35760136.06 -35760135.87 -35760135.67 0.0061 0.0008

Mercury -102619-04-29 16:47 J -35760048.00 -35760047.80 -35760047.60 0.0061 0.0001

Mercury -102619-07-26 18:13 J -35759959.93 -35759959.74 -35759959.54 0.0061 0.0007

Mercury -102619-10-22 19:40 J -35759871.87 -35759871.68 -35759871.48 0.0061 0.0014

Mercury -102618-01-18 20:52 J -35759783.79 -35759783.63 -35759783.43 0.0061 0.0022

Mercury -102618-04-16 22:33 J -35759695.72 -35759695.56 -35759695.37 0.0061 0.0029

Mercury -102618-07-14 00:13 J -35759607.64 -35759607.49 -35759607.33 0.0061 0.0036

Mercury -102618-10-10 01:25 J -35759519.56 -35759519.44 -35759519.28 0.0061 0.0044

Mercury -102617-01-06 03:06 J -35759431.46 -35759431.37 -35759431.25 0.0061 0.0052

Mercury -102617-04-03 04:18 J -35759343.34 -35759343.32 -35759343.24 0.0061 0.0060

Venus -102612-11-09 01:40 J -35757297.57 -35757297.43 -35757297.25 0.0063 0.0045

Venus -102611-06-22 06:13 J -35757072.46 -35757072.24 -35757072.00 0.0063 0.0008

Venus -102610-02-02 10:47 J -35756847.24 -35756847.05 -35756846.84 0.0063 0.0030  
 Moon -102603-03-15 11:30 J -35754249.26 -35754249.02 -35754248.75 0.0066 0.0025  
 Earth -102603-03-15 14:52 J -35754249.11 -35754248.88 -35754248.61 0.0066 0.0026 \*  
 Earth -102602-03-17 07:54 J -35753882.29 -35753882.17 -35753882.03 0.0066 0.0058  
 Moon -102602-03-17 11:16 J -35753882.14 -35753882.03 -35753881.86 0.0066 0.0057 \*  
 Mercury -102528-12-18 15:06 J -35726576.93 -35726576.87 -35726576.79 0.0085 0.0072  
 Mercury -102527-03-16 16:18 J -35726488.90 -35726488.82 -35726488.71 0.0085 0.0059  
 Mercury -102527-06-12 17:45 J -35726400.87 -35726400.76 -35726400.65 0.0085 0.0045  
 Mercury -102527-09-08 18:57 J -35726312.83 -35726312.71 -35726312.58 0.0084 0.0031  
 Mercury -102527-12-05 20:09 J -35726224.78 -35726224.66 -35726224.52 0.0084 0.0018  
 Mercury -102526-03-03 21:35 J -35726136.73 -35726136.60 -35726136.47 0.0084 0.0005  
 Mercury -102526-05-30 22:47 J -35726048.68 -35726048.55 -35726048.42 0.0084 0.0009  
 Mercury -102526-08-26 23:59 J -35725960.63 -35725960.50 -35725960.37 0.0084 0.0022  
 Mercury -102526-11-23 01:11 J -35725872.57 -35725872.45 -35725872.33 0.0084 0.0035  
 Mercury -102525-02-19 02:23 J -35725784.50 -35725784.40 -35725784.29 0.0084 0.0048  
 Mercury -102525-05-17 03:35 J -35725696.44 -35725696.35 -35725696.26 0.0083 0.0061  
 Mercury -102525-08-13 04:47 J -35725608.36 -35725608.30 -35725608.24 0.0083 0.0074  
 Venus -102522-05-16 05:59 J -35724602.38 -35724602.25 -35724602.08 0.0082 0.0059  
 Venus -102522-12-27 16:33 J -35724377.02 -35724376.81 -35724376.60 0.0081 0.0018  
 Mars -102519-10-01 04:47 J -35723368.41 -35723368.30 -35723368.13 0.0080 0.0072  
 Moon -102517-09-14 10:04 J -35722654.27 -35722654.08 -35722653.87 0.0079 0.0045  
 Earth -102517-09-14 13:25 J -35722654.13 -35722653.94 -35722653.71 0.0079 0.0042 \*  
 Mercury -102375-04-20 17:30 J -35670935.77 -35670935.77 -35670935.75 0.0060 0.0060  
 Mercury -102375-07-17 18:28 J -35670847.79 -35670847.73 -35670847.61 0.0060 0.0054  
 Mercury -102375-10-13 20:37 J -35670759.77 -35670759.64 -35670759.51 0.0060 0.0046  
 Mercury -102374-01-09 21:49 J -35670671.73 -35670671.59 -35670671.43 0.0060 0.0039  
 Mercury -102374-04-07 23:16 J -35670583.68 -35670583.53 -35670583.35 0.0060 0.0032  
 Mercury -102374-07-05 00:42 J -35670495.63 -35670495.47 -35670495.27 0.0060 0.0025  
 Mercury -102374-10-01 02:37 J -35670407.58 -35670407.39 -35670407.20 0.0061 0.0017  
 Mercury -102374-12-28 04:04 J -35670319.52 -35670319.33 -35670319.13 0.0061 0.0010

Mercury -102373-03-25 05:30 J -35670231.46 -35670231.27 -35670231.07 0.0061 0.0003

Mercury -102373-06-21 07:11 J -35670143.40 -35670143.20 -35670143.00 0.0061 0.0005

Mercury -102373-09-17 08:23 J -35670055.33 -35670055.15 -35670054.94 0.0061 0.0013

Mercury -102373-12-14 10:04 J -35669967.26 -35669967.08 -35669966.89 0.0061 0.0020

Mercury -102372-03-12 11:30 J -35669879.19 -35669879.02 -35669878.84 0.0061 0.0027

Mercury -102372-06-08 12:42 J -35669791.11 -35669790.97 -35669790.79 0.0061 0.0035

Mercury -102372-09-04 14:37 J -35669703.02 -35669702.89 -35669702.74 0.0061 0.0042

Mercury -102372-12-01 15:49 J -35669614.93 -35669614.84 -35669614.71 0.0061 0.0050

Mercury -102371-02-27 17:30 J -35669526.82 -35669526.77 -35669526.69 0.0061 0.0058

Venus -102366-12-08 11:01 J -35667417.21 -35667417.04 -35667416.82 0.0063 0.0033

Venus -102365-07-20 15:49 J -35667192.06 -35667191.84 -35667191.61 0.0063 0.0004

Venus -102364-03-02 19:40 J -35666966.83 -35666966.68 -35666966.48 0.0063 0.0042

Earth -102357-03-16 16:04 J -35664396.05 -35664395.83 -35664395.57 0.0066 0.0031

Moon -102357-03-16 16:04 J -35664396.04 -35664395.83 -35664395.58 0.0066 0.0031 \*

Moon -102356-03-18 07:11 J -35664029.33 -35664029.20 -35664029.00 0.0066 0.0054

Earth -102356-03-18 08:37 J -35664029.26 -35664029.14 -35664028.94 0.0066 0.0054 \*

Mercury -102282-11-14 05:30 J -35636760.31 -35636760.27 -35636760.21 0.0085 0.0078

Mercury -102281-02-10 06:42 J -35636672.29 -35636672.22 -35636672.13 0.0085 0.0065

Mercury -102281-05-08 08:09 J -35636584.26 -35636584.16 -35636584.05 0.0085 0.0051

Mercury -102281-08-04 09:21 J -35636496.22 -35636496.11 -35636495.99 0.0084 0.0038

Mercury -102281-10-31 10:33 J -35636408.18 -35636408.06 -35636407.93 0.0084 0.0024

Mercury -102280-01-27 11:59 J -35636320.13 -35636320.00 -35636319.87 0.0084 0.0011

Mercury -102280-04-25 13:11 J -35636232.08 -35636231.95 -35636231.82 0.0084 0.0002

Mercury -102280-07-22 14:23 J -35636144.03 -35636143.90 -35636143.77 0.0084 0.0016

Mercury -102280-10-18 15:35 J -35636055.97 -35636055.85 -35636055.72 0.0084 0.0029

Mercury -102279-01-14 16:47 J -35635967.91 -35635967.80 -35635967.68 0.0084 0.0042

Mercury -102279-04-12 17:59 J -35635879.85 -35635879.75 -35635879.65 0.0084 0.0055

Mercury -102279-07-09 18:57 J -35635791.77 -35635791.71 -35635791.62 0.0083 0.0068

Mercury -102279-10-05 20:09 J -35635703.68 -35635703.66 -35635703.61 0.0083 0.0081

Venus -102276-06-13 15:35 J -35634722.02 -35634721.85 -35634721.66 0.0082 0.0045

Venus -102275-01-25 01:25 J -35634496.62 -35634496.44 -35634496.23 0.0081 0.0032  
 Earth -102271-09-16 14:37 J -35632801.05 -35632800.89 -35632800.68 0.0079 0.0053  
 Moon -102271-09-16 16:18 J -35632800.97 -35632800.82 -35632800.63 0.0079 0.0055 \*  
 Moon -102270-09-18 11:16 J -35632434.04 -35632434.03 -35632433.97 0.0078 0.0078  
 Earth -102270-09-18 14:23 J -35632433.93 -35632433.90 -35632433.82 0.0078 0.0077  
 Mercury -102129-06-12 07:54 J -35581031.23 -35581031.17 -35581031.07 0.0060 0.0055  
 Mercury -102129-09-08 09:21 J -35580943.21 -35580943.11 -35580942.97 0.0060 0.0048  
 Mercury -102129-12-05 10:47 J -35580855.17 -35580855.05 -35580854.88 0.0060 0.0041  
 Mercury -102128-03-03 12:42 J -35580767.13 -35580766.97 -35580766.80 0.0060 0.0033  
 Mercury -102128-05-30 13:54 J -35580679.08 -35580678.92 -35580678.73 0.0060 0.0026  
 Mercury -102128-08-26 15:35 J -35580591.03 -35580590.85 -35580590.65 0.0061 0.0018  
 Mercury -102128-11-22 17:16 J -35580502.97 -35580502.78 -35580502.58 0.0061 0.0011  
 Mercury -102127-02-18 18:42 J -35580414.91 -35580414.72 -35580414.52 0.0061 0.0004  
 Mercury -102127-05-17 20:09 J -35580326.85 -35580326.66 -35580326.46 0.0061 0.0004  
 Mercury -102127-08-13 21:49 J -35580238.78 -35580238.59 -35580238.40 0.0061 0.0011  
 Mercury -102127-11-09 23:01 J -35580150.71 -35580150.54 -35580150.34 0.0061 0.0019  
 Mercury -102126-02-06 00:28 J -35580062.64 -35580062.48 -35580062.28 0.0061 0.0026  
 Mercury -102126-05-05 02:23 J -35579974.56 -35579974.40 -35579974.23 0.0061 0.0033  
 Mercury -102126-08-01 03:21 J -35579886.48 -35579886.36 -35579886.19 0.0061 0.0042  
 Mercury -102126-10-28 05:16 J -35579798.39 -35579798.28 -35579798.15 0.0061 0.0048  
 Mercury -102125-01-24 06:28 J -35579710.28 -35579710.23 -35579710.13 0.0061 0.0056  
 Venus -102120-05-25 16:47 J -35577761.88 -35577761.80 -35577761.68 0.0063 0.0056  
 Venus -102119-01-05 21:35 J -35577536.81 -35577536.60 -35577536.38 0.0063 0.0019  
 Venus -102119-08-19 01:40 J -35577311.63 -35577311.43 -35577311.19 0.0063 0.0018  
 Venus -102118-04-01 05:59 J -35577086.34 -35577086.25 -35577086.12 0.0063 0.0056  
 Mars -102115-04-05 22:33 J -35575985.67 -35575985.56 -35575985.38 0.0065 0.0057  
 Earth -102111-03-18 18:28 J -35574542.96 -35574542.73 -35574542.49 0.0066 0.0032  
 Moon -102111-03-18 21:49 J -35574542.80 -35574542.59 -35574542.32 0.0066 0.0033 \*  
 Moon -102110-03-20 08:52 J -35574176.27 -35574176.13 -35574175.95 0.0066 0.0053  
 Earth -102110-03-20 11:01 J -35574176.18 -35574176.04 -35574175.84 0.0066 0.0052 \*

Mercury	-102036-10-09 20:23 J	-35546943.68	-35546943.65	-35546943.59	0.0085	0.0079
Mercury	-102035-01-05 21:49 J	-35546855.66	-35546855.59	-35546855.50	0.0085	0.0065
Mercury	-102035-04-03 23:01 J	-35546767.63	-35546767.54	-35546767.42	0.0085	0.0052
Mercury	-102035-07-01 00:28 J	-35546679.59	-35546679.48	-35546679.36	0.0084	0.0038
Mercury	-102035-09-27 01:54 J	-35546591.55	-35546591.42	-35546591.30	0.0084	0.0025
Mercury	-102035-12-24 03:06 J	-35546503.50	-35546503.37	-35546503.24	0.0084	0.0011
Mercury	-102034-03-22 04:18 J	-35546415.45	-35546415.32	-35546415.19	0.0084	0.0002
Mercury	-102034-06-18 05:30 J	-35546327.40	-35546327.27	-35546327.14	0.0084	0.0015
Mercury	-102034-09-14 06:42 J	-35546239.34	-35546239.22	-35546239.09	0.0084	0.0028
Mercury	-102034-12-11 07:54 J	-35546151.28	-35546151.17	-35546151.05	0.0084	0.0041
Mercury	-102033-03-08 09:06 J	-35546063.21	-35546063.12	-35546063.01	0.0084	0.0054
Mercury	-102033-06-04 10:18 J	-35545975.14	-35545975.07	-35545974.99	0.0083	0.0067
Mercury	-102033-08-31 11:30 J	-35545887.05	-35545887.02	-35545886.98	0.0083	0.0079
Venus	-102030-07-13 03:49 J	-35544841.54	-35544841.34	-35544841.12	0.0082	0.0019
Venus	-102029-02-23 13:54 J	-35544616.07	-35544615.92	-35544615.77	0.0081	0.0057
Earth	-102025-09-17 20:37 J	-35542947.82	-35542947.64	-35542947.44	0.0079	0.0050
Moon	-102025-09-17 22:47 J	-35542947.71	-35542947.55	-35542947.33	0.0079	0.0052 *

# 102ND MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 102nd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury -101883-05-08 20:52 J -35491214.68 -35491214.63 -35491214.55 0.0060 0.0057

Mercury -101883-08-04 22:18 J -35491126.66 -35491126.57 -35491126.44 0.0060 0.0050

Mercury -101883-10-31 23:45 J -35491038.63 -35491038.51 -35491038.35 0.0060 0.0043

Mercury -101882-01-28 01:11 J -35490950.59 -35490950.45 -35490950.27 0.0060 0.0036

Mercury -101882-04-26 03:06 J -35490862.54 -35490862.37 -35490862.19 0.0060 0.0028

Mercury -101882-07-23 04:33 J -35490774.49 -35490774.31 -35490774.12 0.0061 0.0021

Mercury -101882-10-19 05:59 J -35490686.43 -35490686.25 -35490686.05 0.0061 0.0014

Mercury -101881-01-15 07:40 J -35490598.37 -35490598.18 -35490597.98 0.0061 0.0006

Mercury -101881-04-12 09:06 J -35490510.31 -35490510.12 -35490509.92 0.0061 0.0002

Mercury -101881-07-09 10:33 J -35490422.25 -35490422.06 -35490421.86 0.0061 0.0009

Mercury -101881-10-05 11:59 J -35490334.18 -35490334.00 -35490333.80 0.0061 0.0016

Mercury -101880-01-01 13:40 J -35490246.11 -35490245.93 -35490245.75 0.0061 0.0023

Mercury -101880-03-30 14:52 J -35490158.03 -35490157.88 -35490157.69 0.0061 0.0031

Mercury -101880-06-26 16:33 J -35490069.95 -35490069.81 -35490069.65 0.0061 0.0038

Mercury -101880-09-22 17:45 J -35489981.87 -35489981.76 -35489981.61 0.0061 0.0046

Mercury -101880-12-19 19:25 J -35489893.77 -35489893.69 -35489893.58 0.0061 0.0054

Mercury -101879-03-17 20:52 J -35489805.63 -35489805.63 -35489805.59 0.0061 0.0061

Venus -101874-06-24 02:09 J -35487881.57 -35487881.41 -35487881.25 0.0063 0.0045

Venus -101873-02-04 06:13 J -35487656.45 -35487656.24 -35487656.00 0.0063 0.0009

Venus -101873-09-16 10:47 J -35487431.25 -35487431.05 -35487430.84 0.0063 0.0029

Mars -101869-08-27 10:33 J -35485990.33 -35485990.06 -35485989.74 0.0065 0.0018

Moon -101865-03-19 17:16 J -35484689.97 -35484689.78 -35484689.53 0.0066 0.0040

Earth -101865-03-19 18:42 J -35484689.91 -35484689.72 -35484689.47 0.0066 0.0039 \*

Earth -101864-03-21 11:45 J -35484323.18 -35484323.01 -35484322.79 0.0066 0.0046

Moon -101864-03-21 14:52 J -35484323.03 -35484322.88 -35484322.67 0.0066 0.0048 \*

Mercury -101790-09-05 11:01 J -35457127.04 -35457127.04 -35457127.02 0.0085 0.0084

Mercury -101790-12-02 12:13 J -35457039.05 -35457038.99 -35457038.91 0.0085 0.0071

Mercury -101789-02-28 13:40 J -35456951.02 -35456950.93 -35456950.83 0.0085 0.0057

Mercury -101789-05-26 14:52 J -35456862.98 -35456862.88 -35456862.76 0.0084 0.0044

Mercury -101789-08-22 16:04 J -35456774.94 -35456774.83 -35456774.70 0.0084 0.0031

Mercury -101789-11-18 17:30 J -35456686.90 -35456686.77 -35456686.64 0.0084 0.0017

Mercury -101788-02-14 18:42 J -35456598.85 -35456598.72 -35456598.58 0.0084 0.0004

Mercury -101788-05-13 19:54 J -35456510.80 -35456510.67 -35456510.53 0.0084 0.0010

Mercury -101788-08-09 21:06 J -35456422.74 -35456422.62 -35456422.49 0.0084 0.0023

Mercury -101788-11-05 22:18 J -35456334.68 -35456334.57 -35456334.44 0.0084 0.0036

Mercury -101787-02-01 23:30 J -35456246.62 -35456246.52 -35456246.41 0.0084 0.0049

Mercury -101787-05-01 00:42 J -35456158.55 -35456158.47 -35456158.37 0.0083 0.0061

Mercury -101787-07-28 01:40 J -35456070.47 -35456070.43 -35456070.35 0.0083 0.0075

Venus -101785-12-28 03:21 J -35455186.39 -35455186.36 -35455186.30 0.0082 0.0080

Venus -101784-08-10 13:54 J -35454961.14 -35454960.92 -35454960.71 0.0082 0.0004

Venus -101783-03-23 23:16 J -35454735.61 -35454735.53 -35454735.41 0.0081 0.0072

Moon -101779-09-19 19:40 J -35453094.82 -35453094.68 -35453094.48 0.0079 0.0059

Earth -101779-09-19 23:16 J -35453094.68 -35453094.53 -35453094.36 0.0079 0.0059 \*

Earth -101778-09-21 22:18 J -35452727.65 -35452727.57 -35452727.43 0.0078 0.0071

Moon -101778-09-22 01:40 J -35452727.51 -35452727.43 -35452727.30 0.0078 0.0071 \*

Mercury -101637-04-03 09:21 J -35401398.11 -35401398.11 -35401398.09 0.0060 0.0060

Mercury -101637-06-30 10:18 J -35401310.13 -35401310.07 -35401309.95 0.0060 0.0054

Mercury -101637-09-26 12:28 J -35401222.10 -35401221.98 -35401221.85 0.0060 0.0046

Mercury -101637-12-23 13:54 J -35401134.06 -35401133.92 -35401133.76 0.0060 0.0039

Mercury -101636-03-21 15:06 J -35401046.02 -35401045.87 -35401045.68 0.0060 0.0032

Mercury -101636-06-17 16:47 J -35400957.97 -35400957.80 -35400957.61 0.0060 0.0024

Mercury -101636-09-13 18:28 J -35400869.92 -35400869.73 -35400869.54 0.0061 0.0017

Mercury -101636-12-10 19:54 J -35400781.86 -35400781.67 -35400781.47 0.0061 0.0010

Mercury -101635-03-08 21:35 J -35400693.80 -35400693.60 -35400693.40 0.0061 0.0002

Mercury -101635-06-04 23:01 J -35400605.73 -35400605.54 -35400605.34 0.0061 0.0005

Mercury -101635-09-01 00:42 J -35400517.67 -35400517.47 -35400517.28 0.0061 0.0012

Mercury -101635-11-28 01:54 J -35400429.60 -35400429.42 -35400429.22 0.0061 0.0020

Mercury -101634-02-24 03:21 J -35400341.52 -35400341.36 -35400341.17 0.0061 0.0027

Mercury -101634-05-23 05:01 J -35400253.45 -35400253.29 -35400253.12 0.0061 0.0034

Mercury -101634-08-19 06:13 J -35400165.36 -35400165.24 -35400165.08 0.0061 0.0042

Mercury -101634-11-15 07:54 J -35400077.27 -35400077.17 -35400077.04 0.0061 0.0050

Mercury -101633-02-11 09:06 J -35399989.16 -35399989.12 -35399989.02 0.0061 0.0058

Venus -101628-07-22 10:33 J -35398001.24 -35398001.06 -35398000.88 0.0063 0.0037

Venus -101627-03-04 14:52 J -35397776.11 -35397775.88 -35397775.65 0.0063 0.0001

Venus -101627-10-15 18:57 J -35397550.89 -35397550.71 -35397550.51 0.0063 0.0037

Mars -101622-01-18 22:47 J -35395994.83 -35395994.55 -35395994.24 0.0065 0.0018

Moon -101619-03-21 16:04 J -35394836.97 -35394836.83 -35394836.63 0.0066 0.0050

Earth -101619-03-21 18:28 J -35394836.88 -35394836.73 -35394836.51 0.0066 0.0048 \*

Earth -101618-03-23 11:45 J -35394470.22 -35394470.01 -35394469.76 0.0066 0.0037

Moon -101618-03-23 13:11 J -35394470.16 -35394469.95 -35394469.70 0.0066 0.0039 \*

Mercury -101544-10-28 02:52 J -35367222.43 -35367222.38 -35367222.31 0.0085 0.0076

Mercury -101543-01-24 04:18 J -35367134.40 -35367134.32 -35367134.23 0.0085 0.0062

Mercury -101543-04-22 05:30 J -35367046.37 -35367046.27 -35367046.16 0.0085 0.0049

Mercury -101543-07-19 06:42 J -35366958.33 -35366958.22 -35366958.09 0.0084 0.0036

Mercury -101543-10-15 08:09 J -35366870.29 -35366870.16 -35366870.03 0.0084 0.0022

Mercury -101542-01-11 09:21 J -35366782.24 -35366782.11 -35366781.98 0.0084 0.0009

Mercury -101542-04-09 10:33 J -35366694.19 -35366694.06 -35366693.92 0.0084 0.0005

Mercury -101542-07-06 11:45 J -35366606.13 -35366606.01 -35366605.88 0.0084 0.0018

Mercury -101542-10-02 12:57 J -35366518.08 -35366517.96 -35366517.83 0.0084 0.0031

Mercury -101542-12-29 14:09 J -35366430.02 -35366429.91 -35366429.79 0.0084 0.0044

Mercury -101541-03-26 15:21 J -35366341.95 -35366341.86 -35366341.76 0.0083 0.0056

Mercury -101541-06-22 16:18 J -35366253.88 -35366253.82 -35366253.73 0.0083 0.0070

Mercury -101541-09-18 17:45 J -35366165.77 -35366165.76 -35366165.73 0.0083 0.0082

Venus -101538-01-26 13:25 J -35365306.07 -35365305.94 -35365305.80 0.0082 0.0063

Venus -101538-09-08 23:30 J -35365080.73 -35365080.52 -35365080.31 0.0082 0.0013

Mars -101535-06-05 11:01 J -35364080.31 -35364080.04 -35364079.71 0.0080 0.0034

Moon -101533-09-21 01:25 J -35363241.57 -35363241.44 -35363241.30 0.0079 0.0065

Earth -101533-09-21 02:09 J -35363241.53 -35363241.41 -35363241.27 0.0079 0.0066 \*

Moon -101532-09-23 00:42 J -35362874.61 -35362874.47 -35362874.30 0.0078 0.0062



Earth -101532-09-23 01:25 J -35362874.56 -35362874.44 -35362874.27 0.0078 0.0064 \*  
 Mercury -101391-05-26 22:18 J -35311493.59 -35311493.57 -35311493.50 0.0060 0.0059  
 Mercury -101391-08-22 23:45 J -35311405.59 -35311405.51 -35311405.38 0.0060 0.0052  
 Mercury -101391-11-19 01:11 J -35311317.56 -35311317.45 -35311317.29 0.0060 0.0045  
 Mercury -101390-02-15 03:21 J -35311229.52 -35311229.36 -35311229.20 0.0060 0.0037  
 Mercury -101390-05-14 04:33 J -35311141.47 -35311141.31 -35311141.13 0.0060 0.0030  
 Mercury -101390-08-10 05:59 J -35311053.42 -35311053.25 -35311053.05 0.0060 0.0023  
 Mercury -101390-11-06 07:40 J -35310965.36 -35310965.18 -35310964.98 0.0061 0.0015  
 Mercury -101389-02-02 09:21 J -35310877.31 -35310877.11 -35310876.91 0.0061 0.0008  
 Mercury -101389-04-30 10:47 J -35310789.24 -35310789.05 -35310788.85 0.0061 0.0001  
 Mercury -101389-07-27 12:13 J -35310701.18 -35310700.99 -35310700.79 0.0061 0.0007  
 Mercury -101389-10-23 13:40 J -35310613.11 -35310612.93 -35310612.73 0.0061 0.0014  
 Mercury -101388-01-19 15:21 J -35310525.04 -35310524.86 -35310524.67 0.0061 0.0021  
 Mercury -101388-04-17 16:33 J -35310436.97 -35310436.81 -35310436.62 0.0061 0.0029  
 Mercury -101388-07-14 18:13 J -35310348.89 -35310348.74 -35310348.57 0.0061 0.0036  
 Mercury -101388-10-10 19:25 J -35310260.80 -35310260.69 -35310260.53 0.0061 0.0044  
 Mercury -101387-01-06 21:06 J -35310172.71 -35310172.62 -35310172.49 0.0061 0.0051  
 Mercury -101387-04-04 23:01 J -35310084.59 -35310084.54 -35310084.48 0.0061 0.0059  
 Venus -101382-08-20 17:16 J -35308120.95 -35308120.78 -35308120.57 0.0063 0.0034  
 Venus -101381-04-01 21:49 J -35307895.81 -35307895.59 -35307895.36 0.0063 0.0003  
 Venus -101381-11-13 01:40 J -35307670.58 -35307670.43 -35307670.23 0.0063 0.0041  
 Mars -101376-06-11 03:21 J -35305999.56 -35305999.36 -35305999.12 0.0065 0.0044  
 Earth -101373-03-22 15:06 J -35304983.91 -35304983.87 -35304983.76 0.0066 0.0063  
 Moon -101372-03-24 05:16 J -35304617.53 -35304617.28 -35304617.02 0.0066 0.0024  
 Earth -101372-03-24 08:52 J -35304617.38 -35304617.13 -35304616.87 0.0066 0.0021 \*  
 Mercury -101298-12-20 17:45 J -35277317.82 -35277317.76 -35277317.69 0.0085 0.0074  
 Mercury -101297-03-17 18:57 J -35277229.79 -35277229.71 -35277229.61 0.0085 0.0061  
 Mercury -101297-06-13 20:09 J -35277141.76 -35277141.66 -35277141.54 0.0084 0.0047  
 Mercury -101297-09-09 21:35 J -35277053.72 -35277053.60 -35277053.48 0.0084 0.0034  
 Mercury -101297-12-06 22:47 J -35276965.67 -35276965.55 -35276965.42 0.0084 0.0021

Mercury -101296-03-04 23:59 J -35276877.62 -35276877.50 -35276877.36 0.0084 0.0008

Mercury -101296-06-01 01:25 J -35276789.57 -35276789.44 -35276789.31 0.0084 0.0006

Mercury -101296-08-28 02:37 J -35276701.52 -35276701.39 -35276701.26 0.0084 0.0019

Mercury -101296-11-24 03:35 J -35276613.46 -35276613.35 -35276613.22 0.0084 0.0032

Mercury -101295-02-20 04:47 J -35276525.40 -35276525.30 -35276525.18 0.0084 0.0045

Mercury -101295-05-19 05:59 J -35276437.33 -35276437.25 -35276437.14 0.0083 0.0058

Mercury -101295-08-15 07:11 J -35276349.26 -35276349.20 -35276349.12 0.0083 0.0070

Mercury -101295-11-11 08:37 J -35276261.15 -35276261.14 -35276261.13 0.0083 0.0082

Venus -101292-02-23 19:54 J -35275425.80 -35275425.67 -35275425.54 0.0082 0.0063

Venus -101292-10-07 05:45 J -35275200.47 -35275200.26 -35275200.04 0.0082 0.0013

Mars -101289-10-26 13:25 J -35274085.24 -35274084.94 -35274084.60 0.0080 0.0020

Jupiter -101287-07-23 11:45 J -35273450.49 -35273450.01 -35273449.47 0.0079 0.0023

Moon -101286-09-24 20:23 J -35273021.85 -35273021.65 -35273021.42 0.0078 0.0037

Earth -101286-09-24 23:16 J -35273021.73 -35273021.53 -35273021.30 0.0078 0.0040 \*

Mercury -101145-07-18 11:01 J -35221589.05 -35221589.04 -35221588.99 0.0060 0.0059

Mercury -101145-10-14 12:28 J -35221501.06 -35221500.98 -35221500.86 0.0060 0.0052

Mercury -101144-01-10 13:54 J -35221413.03 -35221412.92 -35221412.77 0.0060 0.0045

Mercury -101144-04-08 15:49 J -35221324.99 -35221324.84 -35221324.68 0.0060 0.0038

Mercury -101144-07-05 17:16 J -35221236.94 -35221236.78 -35221236.60 0.0060 0.0031

Mercury -101144-10-01 18:42 J -35221148.89 -35221148.72 -35221148.53 0.0060 0.0024

Mercury -101144-12-28 20:09 J -35221060.84 -35221060.66 -35221060.46 0.0061 0.0017

Mercury -101143-03-26 21:49 J -35220972.78 -35220972.59 -35220972.39 0.0061 0.0009

Mercury -101143-06-22 23:16 J -35220884.72 -35220884.53 -35220884.33 0.0061 0.0002

Mercury -101143-09-19 00:42 J -35220796.66 -35220796.47 -35220796.27 0.0061 0.0006

Mercury -101143-12-16 02:09 J -35220708.59 -35220708.41 -35220708.21 0.0061 0.0013

Mercury -101142-03-14 03:49 J -35220620.52 -35220620.34 -35220620.15 0.0061 0.0020

Mercury -101142-06-10 05:01 J -35220532.45 -35220532.29 -35220532.10 0.0061 0.0028

Mercury -101142-09-06 06:42 J -35220444.37 -35220444.22 -35220444.05 0.0061 0.0035

Mercury -101142-12-03 08:23 J -35220356.28 -35220356.15 -35220356.00 0.0061 0.0043

Mercury -101141-02-29 09:35 J -35220268.19 -35220268.10 -35220267.97 0.0061 0.0050

Mercury -101141-05-27 11:16 J -35220180.08 -35220180.03 -35220179.95 0.0061 0.0058

Venus -101136-09-17 22:33 J -35218240.72 -35218240.56 -35218240.34 0.0063 0.0035

Venus -101135-05-01 03:35 J -35218015.58 -35218015.35 -35218015.13 0.0063 0.0002

Venus -101135-12-12 07:25 J -35217790.35 -35217790.19 -35217789.99 0.0063 0.0039

Mars -101130-11-02 05:16 J -35216004.32 -35216004.28 -35216004.14 0.0065 0.0062

Earth -101126-03-26 03:06 J -35214764.64 -35214764.37 -35214764.10 0.0066 0.0001

Moon -101126-03-26 04:47 J -35214764.56 -35214764.30 -35214764.03 0.0066 0.0003 \*

Mercury -101051-02-11 08:09 J -35187413.21 -35187413.16 -35187413.09 0.0085 0.0074

Mercury -101051-05-10 09:21 J -35187325.19 -35187325.11 -35187325.01 0.0085 0.0061

Mercury -101051-08-06 10:47 J -35187237.15 -35187237.05 -35187236.94 0.0084 0.0047

Mercury -101051-11-02 11:59 J -35187149.11 -35187149.00 -35187148.87 0.0084 0.0034

Mercury -101050-01-29 13:11 J -35187061.07 -35187060.95 -35187060.81 0.0084 0.0021

Mercury -101050-04-27 14:37 J -35186973.02 -35186972.89 -35186972.76 0.0084 0.0008

Mercury -101050-07-24 15:49 J -35186884.97 -35186884.84 -35186884.70 0.0084 0.0006

Mercury -101050-10-20 17:01 J -35186796.91 -35186796.79 -35186796.66 0.0084 0.0019

Mercury -101049-01-16 18:13 J -35186708.86 -35186708.74 -35186708.61 0.0084 0.0031

Mercury -101049-04-13 19:25 J -35186620.79 -35186620.69 -35186620.57 0.0084 0.0044

Mercury -101049-07-10 20:52 J -35186532.73 -35186532.63 -35186532.54 0.0083 0.0057

Mercury -101049-10-06 21:49 J -35186444.65 -35186444.59 -35186444.51 0.0083 0.0070

Mercury -101048-01-02 23:01 J -35186356.55 -35186356.54 -35186356.51 0.0083 0.0082

Venus -101046-03-25 01:11 J -35185545.55 -35185545.45 -35185545.30 0.0082 0.0067

Venus -101046-11-05 11:30 J -35185320.22 -35185320.02 -35185319.80 0.0082 0.0010

Mars -101042-03-19 13:11 J -35184090.10 -35184089.95 -35184089.73 0.0080 0.0066

Earth -101040-09-25 19:25 J -35183168.93 -35183168.69 -35183168.44 0.0078 0.0013

Moon -101040-09-25 22:04 J -35183168.82 -35183168.58 -35183168.34 0.0078 0.0010 \*

# 101ST MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 101st millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-100899-12-07 00:28 J	-35131596.54	-35131596.48	-35131596.38	0.0060	0.0055		
Mercury	-100898-03-05 01:54 J	-35131508.52	-35131508.42	-35131508.28	0.0060	0.0048		
Mercury	-100898-06-01 03:35 J	-35131420.48	-35131420.35	-35131420.19	0.0060	0.0040		
Mercury	-100898-08-28 05:01 J	-35131332.44	-35131332.29	-35131332.11	0.0060	0.0033		
Mercury	-100898-11-24 06:57 J	-35131244.39	-35131244.21	-35131244.03	0.0060	0.0026		
Mercury	-100897-02-20 08:23 J	-35131156.34	-35131156.15	-35131155.96	0.0060	0.0019		
Mercury	-100897-05-18 09:49 J	-35131068.28	-35131068.09	-35131067.89	0.0061	0.0012		
Mercury	-100897-08-14 11:16 J	-35130980.22	-35130980.03	-35130979.83	0.0061	0.0005		
Mercury	-100897-11-10 12:57 J	-35130892.16	-35130891.96	-35130891.76	0.0061	0.0003		
Mercury	-100896-02-06 14:09 J	-35130804.09	-35130803.91	-35130803.70	0.0061	0.0011		
Mercury	-100896-05-05 15:35 J	-35130716.02	-35130715.85	-35130715.65	0.0061	0.0018		
Mercury	-100896-08-01 17:16 J	-35130627.95	-35130627.78	-35130627.59	0.0061	0.0025		
Mercury	-100896-10-28 18:57 J	-35130539.87	-35130539.71	-35130539.54	0.0061	0.0032		
Mercury	-100895-01-24 19:54 J	-35130451.79	-35130451.67	-35130451.50	0.0061	0.0040		
Mercury	-100895-04-22 21:35 J	-35130363.70	-35130363.60	-35130363.46	0.0061	0.0048		
Mercury	-100895-07-19 22:47 J	-35130275.60	-35130275.55	-35130275.43	0.0061	0.0056		
Venus	-100890-10-17 03:06 J	-35128360.53	-35128360.37	-35128360.18	0.0063	0.0039		
Venus	-100889-05-29 07:40 J	-35128135.40	-35128135.18	-35128134.95	0.0063	0.0003		
Venus	-100888-01-09 11:59 J	-35127910.18	-35127910.00	-35127909.79	0.0063	0.0034		
Earth	-100880-03-26 18:13 J	-35124911.96	-35124911.74	-35124911.47	0.0066	0.0028		
Moon	-100880-03-26 21:06 J	-35124911.86	-35124911.62	-35124911.35	0.0066	0.0025 *		
Moon	-100879-03-28 11:16 J	-35124545.17	-35124545.03	-35124544.88	0.0067	0.0055		

Earth -100879-03-28 11:16 J -35124545.13 -35124545.03 -35124544.86 0.0067 0.0058 \*  
 Mercury -100805-04-04 21:49 J -35097508.62 -35097508.59 -35097508.55 0.0085 0.0081  
 Mercury -100805-07-01 23:01 J -35097420.61 -35097420.54 -35097420.46 0.0085 0.0068  
 Mercury -100805-09-28 00:13 J -35097332.58 -35097332.49 -35097332.38 0.0085 0.0055  
 Mercury -100805-12-25 01:25 J -35097244.55 -35097244.44 -35097244.32 0.0084 0.0041  
 Mercury -100804-03-23 02:37 J -35097156.50 -35097156.39 -35097156.26 0.0084 0.0029  
 Mercury -100804-06-19 04:04 J -35097068.46 -35097068.33 -35097068.20 0.0084 0.0015  
 Mercury -100804-09-15 05:16 J -35096980.41 -35096980.28 -35096980.14 0.0084 0.0003  
 Mercury -100804-12-12 06:28 J -35096892.36 -35096892.23 -35096892.09 0.0084 0.0012  
 Mercury -100803-03-10 07:40 J -35096804.30 -35096804.18 -35096804.05 0.0084 0.0024  
 Mercury -100803-06-06 09:06 J -35096716.24 -35096716.12 -35096716.01 0.0084 0.0037  
 Mercury -100803-09-02 10:04 J -35096628.18 -35096628.08 -35096627.97 0.0084 0.0050  
 Mercury -100803-11-29 11:16 J -35096540.11 -35096540.03 -35096539.94 0.0083 0.0063  
 Mercury -100802-02-25 12:28 J -35096452.03 -35096451.98 -35096451.92 0.0083 0.0075  
 Venus -100800-12-03 13:40 J -35095440.14 -35095439.93 -35095439.71 0.0082 0.0010  
 Venus -100799-07-16 23:30 J -35095214.63 -35095214.52 -35095214.38 0.0081 0.0065  
 Earth -100794-09-27 10:18 J -35093316.28 -35093316.07 -35093315.83 0.0078 0.0031  
 Moon -100794-09-27 11:59 J -35093316.23 -35093316.00 -35093315.77 0.0078 0.0034 \*  
 Mercury -100652-01-28 11:59 J -35041692.02 -35041692.00 -35041691.97 0.0060 0.0059  
 Mercury -100652-04-26 13:25 J -35041604.03 -35041603.94 -35041603.84 0.0060 0.0053  
 Mercury -100652-07-23 14:52 J -35041516.00 -35041515.88 -35041515.74 0.0060 0.0046  
 Mercury -100652-10-19 16:18 J -35041427.96 -35041427.82 -35041427.66 0.0060 0.0039  
 Mercury -100651-01-15 17:45 J -35041339.91 -35041339.76 -35041339.58 0.0060 0.0032  
 Mercury -100651-04-13 19:11 J -35041251.87 -35041251.70 -35041251.50 0.0060 0.0025  
 Mercury -100651-07-10 20:37 J -35041163.81 -35041163.64 -35041163.43 0.0061 0.0018  
 Mercury -100651-10-06 22:33 J -35041075.75 -35041075.56 -35041075.36 0.0061 0.0010  
 Mercury -100650-01-02 23:59 J -35040987.69 -35040987.50 -35040987.30 0.0061 0.0003  
 Mercury -100650-04-01 01:25 J -35040899.63 -35040899.44 -35040899.24 0.0061 0.0005  
 Mercury -100650-06-28 03:06 J -35040811.56 -35040811.37 -35040811.18 0.0061 0.0012  
 Mercury -100650-09-24 04:33 J -35040723.49 -35040723.31 -35040723.12 0.0061 0.0019

Mercury -100650-12-21 05:45 J -35040635.42 -35040635.26 -35040635.06 0.0061 0.0027  
 Mercury -100649-03-18 07:25 J -35040547.34 -35040547.19 -35040547.01 0.0061 0.0034  
 Mercury -100649-06-14 09:06 J -35040459.26 -35040459.12 -35040458.97 0.0061 0.0041  
 Mercury -100649-09-10 10:18 J -35040371.17 -35040371.07 -35040370.93 0.0061 0.0049  
 Mercury -100649-12-07 11:59 J -35040283.06 -35040283.00 -35040282.91 0.0061 0.0056  
 Venus -100644-11-14 05:30 J -35038480.38 -35038480.27 -35038480.10 0.0063 0.0050  
 Venus -100643-06-27 10:18 J -35038255.29 -35038255.07 -35038254.84 0.0063 0.0013  
 Venus -100642-02-07 14:37 J -35038030.09 -35038029.89 -35038029.67 0.0063 0.0023  
 Venus -100642-09-20 18:28 J -35037804.77 -35037804.73 -35037804.63 0.0063 0.0061  
 Moon -100634-03-28 04:04 J -35035059.43 -35035059.33 -35035059.20 0.0066 0.0060  
 Earth -100634-03-28 07:11 J -35035059.26 -35035059.20 -35035059.08 0.0066 0.0062 \*  
 Earth -100633-03-29 00:28 J -35034692.72 -35034692.48 -35034692.22 0.0066 0.0023  
 Moon -100633-03-29 04:18 J -35034692.57 -35034692.32 -35034692.05 0.0066 0.0021 \*  
 Mercury -100559-08-24 12:13 J -35007516.04 -35007515.99 -35007515.94 0.0085 0.0077  
 Mercury -100559-11-20 13:25 J -35007428.02 -35007427.94 -35007427.85 0.0085 0.0064  
 Mercury -100558-02-16 14:37 J -35007339.99 -35007339.89 -35007339.78 0.0084 0.0051  
 Mercury -100558-05-15 15:49 J -35007251.95 -35007251.84 -35007251.71 0.0084 0.0038  
 Mercury -100558-08-11 17:16 J -35007163.91 -35007163.78 -35007163.65 0.0084 0.0024  
 Mercury -100558-11-07 18:28 J -35007075.86 -35007075.73 -35007075.60 0.0084 0.0011  
 Mercury -100557-02-03 19:40 J -35006987.81 -35006987.68 -35006987.54 0.0084 0.0004  
 Mercury -100557-05-01 21:06 J -35006899.75 -35006899.62 -35006899.49 0.0084 0.0015  
 Mercury -100557-07-28 22:04 J -35006811.70 -35006811.58 -35006811.45 0.0084 0.0028  
 Mercury -100557-10-24 23:16 J -35006723.64 -35006723.53 -35006723.41 0.0084 0.0041  
 Mercury -100556-01-21 00:28 J -35006635.57 -35006635.48 -35006635.37 0.0083 0.0054  
 Mercury -100556-04-19 01:40 J -35006547.50 -35006547.43 -35006547.34 0.0083 0.0066  
 Mercury -100556-07-16 03:06 J -35006459.41 -35006459.37 -35006459.33 0.0083 0.0079  
 Venus -100553-01-01 14:23 J -35005560.08 -35005559.90 -35005559.69 0.0082 0.0033  
 Venus -100553-08-14 00:13 J -35005334.65 -35005334.49 -35005334.28 0.0082 0.0043  
 Earth -100547-09-29 23:30 J -35003096.69 -35003096.52 -35003096.31 0.0078 0.0051  
 Moon -100547-09-30 02:23 J -35003096.55 -35003096.40 -35003096.19 0.0078 0.0055 \*

Mercury -100406-06-18 23:45 J -34951699.52 -34951699.51 -34951699.46 0.0060 0.0059

Mercury -100406-09-15 01:11 J -34951611.53 -34951611.45 -34951611.34 0.0060 0.0053

Mercury -100406-12-12 02:37 J -34951523.50 -34951523.39 -34951523.24 0.0060 0.0046

Mercury -100405-03-09 04:04 J -34951435.46 -34951435.33 -34951435.16 0.0060 0.0039

Mercury -100405-06-05 05:45 J -34951347.41 -34951347.26 -34951347.08 0.0060 0.0031

Mercury -100405-09-01 07:11 J -34951259.36 -34951259.20 -34951259.00 0.0060 0.0024

Mercury -100405-11-28 09:06 J -34951171.31 -34951171.12 -34951170.93 0.0060 0.0017

Mercury -100404-02-24 10:33 J -34951083.25 -34951083.06 -34951082.86 0.0061 0.0010

Mercury -100404-05-23 11:59 J -34950995.19 -34950995.00 -34950994.80 0.0061 0.0003

Mercury -100404-08-19 13:40 J -34950907.13 -34950906.93 -34950906.73 0.0061 0.0005

Mercury -100404-11-15 15:06 J -34950819.06 -34950818.87 -34950818.67 0.0061 0.0012

Mercury -100403-02-11 16:18 J -34950730.99 -34950730.82 -34950730.62 0.0061 0.0020

Mercury -100403-05-10 17:45 J -34950642.92 -34950642.76 -34950642.56 0.0061 0.0027

Mercury -100403-08-06 19:25 J -34950554.84 -34950554.69 -34950554.51 0.0061 0.0034

Mercury -100403-11-02 21:06 J -34950466.76 -34950466.62 -34950466.47 0.0061 0.0041

Mercury -100402-01-29 22:18 J -34950378.67 -34950378.57 -34950378.43 0.0061 0.0049

Mercury -100402-04-27 23:59 J -34950290.56 -34950290.50 -34950290.41 0.0061 0.0057

Venus -100398-12-13 07:40 J -34948600.18 -34948600.18 -34948600.16 0.0063 0.0063

Venus -100397-07-25 11:45 J -34948375.20 -34948375.01 -34948374.79 0.0063 0.0027

Venus -100396-03-07 16:18 J -34948150.05 -34948149.82 -34948149.60 0.0063 0.0009

Venus -100396-10-18 19:54 J -34947924.80 -34947924.67 -34947924.49 0.0063 0.0046

Mars -100390-01-05 13:11 J -34946020.01 -34946019.95 -34946019.80 0.0065 0.0061

Moon -100387-03-30 09:35 J -34944840.36 -34944840.10 -34944839.83 0.0066 0.0018

Earth -100387-03-30 11:30 J -34944840.27 -34944840.02 -34944839.75 0.0066 0.0017 \*

Mercury -100312-01-12 01:40 J -34917523.47 -34917523.43 -34917523.38 0.0085 0.0079

Mercury -100312-04-10 02:52 J -34917435.45 -34917435.38 -34917435.29 0.0085 0.0066

Mercury -100312-07-07 04:18 J -34917347.42 -34917347.32 -34917347.21 0.0084 0.0052

Mercury -100312-10-03 05:30 J -34917259.38 -34917259.27 -34917259.15 0.0084 0.0039

Mercury -100312-12-30 06:42 J -34917171.34 -34917171.22 -34917171.09 0.0084 0.0026

Mercury -100311-03-28 08:09 J -34917083.29 -34917083.16 -34917083.03 0.0084 0.0013

Mercury -100311-06-24 09:21 J -34916995.24 -34916995.11 -34916994.98 0.0084 0.0001

Mercury -100311-09-20 10:33 J -34916907.19 -34916907.06 -34916906.93 0.0084 0.0013

Mercury -100311-12-17 11:45 J -34916819.13 -34916819.01 -34916818.88 0.0084 0.0026

Mercury -100310-03-15 12:57 J -34916731.07 -34916730.96 -34916730.84 0.0084 0.0039

Mercury -100310-06-11 14:09 J -34916643.01 -34916642.91 -34916642.80 0.0083 0.0051

Mercury -100310-09-07 15:06 J -34916554.94 -34916554.87 -34916554.77 0.0083 0.0064

Mercury -100310-12-04 16:33 J -34916466.86 -34916466.81 -34916466.76 0.0083 0.0076

Venus -100307-01-29 12:13 J -34915680.07 -34915679.99 -34915679.86 0.0082 0.0071

Venus -100307-09-11 22:47 J -34915454.76 -34915454.55 -34915454.33 0.0082 0.0005

Venus -100306-04-25 08:09 J -34915229.18 -34915229.16 -34915229.09 0.0081 0.0080

Mars -100303-05-21 10:18 J -34914107.23 -34914107.07 -34914106.85 0.0080 0.0065

Moon -100301-09-30 05:45 J -34913244.50 -34913244.26 -34913244.00 0.0078 0.0009

Earth -100301-09-30 08:52 J -34913244.37 -34913244.13 -34913243.88 0.0078 0.0011 \*

Mercury -100159-02-02 11:59 J -34861619.05 -34861619.00 -34861618.91 0.0060 0.0056

Mercury -100159-05-01 13:25 J -34861531.03 -34861530.94 -34861530.81 0.0060 0.0049

Mercury -100159-07-28 14:52 J -34861443.00 -34861442.88 -34861442.72 0.0060 0.0043

Mercury -100159-10-24 16:18 J -34861354.95 -34861354.82 -34861354.63 0.0060 0.0036

Mercury -100158-01-20 18:28 J -34861266.91 -34861266.73 -34861266.56 0.0060 0.0028

Mercury -100158-04-18 19:40 J -34861178.86 -34861178.68 -34861178.49 0.0060 0.0021

Mercury -100158-07-15 21:21 J -34861090.80 -34861090.61 -34861090.42 0.0061 0.0014

Mercury -100158-10-11 22:47 J -34861002.74 -34861002.55 -34861002.35 0.0061 0.0007

Mercury -100157-01-08 00:28 J -34860914.68 -34860914.48 -34860914.28 0.0061 0.0001

Mercury -100157-04-05 01:54 J -34860826.61 -34860826.42 -34860826.22 0.0061 0.0008

Mercury -100157-07-02 03:06 J -34860738.55 -34860738.37 -34860738.16 0.0061 0.0016

Mercury -100157-09-28 04:33 J -34860650.47 -34860650.31 -34860650.11 0.0061 0.0023

Mercury -100157-12-25 06:13 J -34860562.40 -34860562.24 -34860562.06 0.0061 0.0030

Mercury -100156-03-23 07:54 J -34860474.32 -34860474.17 -34860474.01 0.0061 0.0037

Mercury -100156-06-19 09:06 J -34860386.23 -34860386.12 -34860385.97 0.0061 0.0045

Mercury -100156-09-15 10:47 J -34860298.13 -34860298.05 -34860297.93 0.0061 0.0052

Mercury -100156-12-12 12:42 J -34860210.01 -34860209.97 -34860209.93 0.0061 0.0060



Venus -100151-08-23 11:16 J -34858495.16 -34858495.03 -34858494.87 0.0063 0.0048

Venus -100150-04-05 15:21 J -34858270.07 -34858269.86 -34858269.62 0.0063 0.0013

Venus -100150-11-16 19:40 J -34858044.88 -34858044.68 -34858044.46 0.0063 0.0024

Venus -100149-06-28 23:59 J -34857819.55 -34857819.50 -34857819.42 0.0063 0.0061

Mars -100144-05-27 21:06 J -34856025.84 -34856025.62 -34856025.34 0.0065 0.0037

Moon -100141-03-30 16:04 J -34854987.83 -34854987.83 -34854987.81 0.0066 0.0066

Moon -100140-04-01 10:47 J -34854621.31 -34854621.05 -34854620.77 0.0066 0.0017

Earth -100140-04-01 10:33 J -34854621.30 -34854621.06 -34854620.78 0.0066 0.0019 \*

Mercury -100066-08-29 15:49 J -34827442.90 -34827442.84 -34827442.76 0.0085 0.0072

Mercury -100066-11-25 17:01 J -34827354.87 -34827354.79 -34827354.69 0.0085 0.0058

Mercury -100065-02-21 18:13 J -34827266.84 -34827266.74 -34827266.62 0.0084 0.0046

Mercury -100065-05-19 19:40 J -34827178.80 -34827178.68 -34827178.55 0.0084 0.0032

Mercury -100065-08-15 20:52 J -34827090.75 -34827090.63 -34827090.50 0.0084 0.0019

Mercury -100065-11-11 22:18 J -34827002.70 -34827002.57 -34827002.44 0.0084 0.0006

Mercury -100064-02-07 23:30 J -34826914.65 -34826914.52 -34826914.39 0.0084 0.0007

Mercury -100064-05-07 00:42 J -34826826.60 -34826826.47 -34826826.34 0.0084 0.0020

Mercury -100064-08-03 01:54 J -34826738.54 -34826738.42 -34826738.30 0.0084 0.0033

Mercury -100064-10-30 03:06 J -34826650.48 -34826650.37 -34826650.26 0.0084 0.0045

Mercury -100063-01-26 04:04 J -34826562.41 -34826562.33 -34826562.22 0.0083 0.0059

Mercury -100063-04-24 05:30 J -34826474.33 -34826474.27 -34826474.20 0.0083 0.0071

Mercury -100063-07-21 06:42 J -34826386.22 -34826386.22 -34826386.21 0.0083 0.0083

Venus -100061-10-09 18:28 J -34825574.91 -34825574.73 -34825574.54 0.0082 0.0041

Venus -100060-05-23 04:33 J -34825349.50 -34825349.31 -34825349.11 0.0082 0.0034

Mars -100057-10-10 03:49 J -34824113.64 -34824113.34 -34824113.02 0.0080 0.0027

Moon -100054-10-03 11:59 J -34823025.18 -34823025.00 -34823024.77 0.0078 0.0047

Earth -100054-10-03 13:25 J -34823025.12 -34823024.94 -34823024.72 0.0078 0.0047 \*

# 100TH MILLENNIUM

# BCE

**This is a list of transits visible from Pluto in the 100th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-99913-09-18 23:30 J	-34771538.57	-34771538.52	-34771538.41	0.0060	0.0056		
Mercury	-99913-12-16 01:11 J	-34771450.55	-34771450.45	-34771450.31	0.0060	0.0048		
Mercury	-99912-03-14 02:37 J	-34771362.51	-34771362.39	-34771362.22	0.0060	0.0041		
Mercury	-99912-06-10 04:04 J	-34771274.47	-34771274.33	-34771274.14	0.0060	0.0035		
Mercury	-99912-09-06 05:59 J	-34771186.42	-34771186.25	-34771186.07	0.0060	0.0027		
Mercury	-99912-12-03 07:25 J	-34771098.37	-34771098.19	-34771097.99	0.0060	0.0020		
Mercury	-99911-03-01 08:52 J	-34771010.31	-34771010.13	-34771009.93	0.0061	0.0013		
Mercury	-99911-05-28 10:33 J	-34770922.25	-34770922.06	-34770921.86	0.0061	0.0005		
Mercury	-99911-08-24 12:13 J	-34770834.19	-34770833.99	-34770833.80	0.0061	0.0002		
Mercury	-99911-11-20 13:40 J	-34770746.13	-34770745.93	-34770745.74	0.0061	0.0009		
Mercury	-99910-02-16 14:52 J	-34770658.06	-34770657.88	-34770657.68	0.0061	0.0017		
Mercury	-99910-05-15 16:18 J	-34770569.99	-34770569.82	-34770569.62	0.0061	0.0024		
Mercury	-99910-08-11 17:59 J	-34770481.91	-34770481.75	-34770481.57	0.0061	0.0031		
Mercury	-99910-11-07 19:25 J	-34770393.83	-34770393.69	-34770393.52	0.0061	0.0038		
Mercury	-99909-02-03 20:37 J	-34770305.74	-34770305.64	-34770305.48	0.0061	0.0046		
Mercury	-99909-05-01 22:18 J	-34770217.64	-34770217.57	-34770217.45	0.0061	0.0053		
Mercury	-99909-07-29 00:13 J	-34770129.51	-34770129.49	-34770129.46	0.0061	0.0061		
Venus	-99904-05-03 13:11 J	-34768390.13	-34768389.95	-34768389.76	0.0063	0.0038		
Venus	-99904-12-14 17:30 J	-34768164.99	-34768164.77	-34768164.54	0.0063	0.0003		

Venus -99903-07-27 21:21 J -34767939.78 -34767939.61 -34767939.39 0.0063 0.0034  
 Mars -99898-10-18 01:54 J -34766031.72 -34766031.42 -34766031.11 0.0065 0.0003  
 Moon -99894-04-02 10:18 J -34764769.25 -34764769.07 -34764768.84 0.0066 0.0042  
 Earth -99894-04-02 13:25 J -34764769.13 -34764768.94 -34764768.69 0.0066 0.0040 \*  
 Earth -99893-04-03 06:42 J -34764402.39 -34764402.22 -34764402.01 0.0067 0.0047  
 Moon -99893-04-03 08:52 J -34764402.29 -34764402.13 -34764401.92 0.0067 0.0050 \*  
 Mercury -99819-01-17 03:35 J -34737450.35 -34737450.35 -34737450.34 0.0085 0.0085  
 Mercury -99819-04-15 04:47 J -34737362.36 -34737362.30 -34737362.22 0.0085 0.0071  
 Mercury -99819-07-12 06:13 J -34737274.33 -34737274.24 -34737274.14 0.0084 0.0058  
 Mercury -99819-10-08 07:25 J -34737186.30 -34737186.19 -34737186.07 0.0084 0.0045  
 Mercury -99818-01-04 08:52 J -34737098.25 -34737098.13 -34737098.01 0.0084 0.0032  
 Mercury -99818-04-02 10:04 J -34737010.21 -34737010.08 -34737009.95 0.0084 0.0019  
 Mercury -99818-06-29 11:16 J -34736922.16 -34736922.03 -34736921.90 0.0084 0.0006  
 Mercury -99818-09-25 12:28 J -34736834.11 -34736833.98 -34736833.85 0.0084 0.0007  
 Mercury -99818-12-22 13:40 J -34736746.05 -34736745.93 -34736745.80 0.0084 0.0020  
 Mercury -99817-03-19 14:52 J -34736658.00 -34736657.88 -34736657.75 0.0084 0.0033  
 Mercury -99817-06-15 16:04 J -34736569.93 -34736569.83 -34736569.71 0.0083 0.0046  
 Mercury -99817-09-11 17:16 J -34736481.87 -34736481.78 -34736481.68 0.0083 0.0058  
 Mercury -99817-12-08 18:28 J -34736393.79 -34736393.73 -34736393.66 0.0083 0.0071  
 Mercury -99816-03-06 19:40 J -34736305.68 -34736305.68 -34736305.67 0.0083 0.0083  
 Venus -99814-06-20 20:52 J -34735469.82 -34735469.63 -34735469.42 0.0082 0.0028  
 Venus -99813-02-01 06:57 J -34735244.37 -34735244.21 -34735244.02 0.0081 0.0047  
 Mars -99810-03-01 08:23 J -34734120.41 -34734120.15 -34734119.86 0.0080 0.0043  
 Moon -99808-10-03 12:13 J -34733173.18 -34733172.99 -34733172.76 0.0078 0.0040  
 Earth -99808-10-03 14:09 J -34733173.10 -34733172.91 -34733172.68 0.0078 0.0041 \*  
 Mercury -99666-05-06 09:49 J -34681458.11 -34681458.09 -34681458.06 0.0060 0.0059  
 Mercury -99666-08-02 11:16 J -34681370.12 -34681370.03 -34681369.93 0.0060 0.0053  
 Mercury -99666-10-29 12:42 J -34681282.09 -34681281.97 -34681281.83 0.0060 0.0046  
 Mercury -99665-01-25 14:08 J -34681194.05 -34681193.91 -34681193.75 0.0060 0.0039  
 Mercury -99665-04-22 15:35 J -34681106.00 -34681105.85 -34681105.67 0.0060 0.0032

Mercury -99665-07-19 17:16 J -34681017.95 -34681017.78 -34681017.59 0.0060 0.0025

Mercury -99665-10-15 18:42 J -34680929.90 -34680929.72 -34680929.52 0.0060 0.0018

Mercury -99664-01-11 20:08 J -34680841.84 -34680841.66 -34680841.45 0.0061 0.0011

Mercury -99664-04-09 21:49 J -34680753.78 -34680753.59 -34680753.39 0.0061 0.0003

Mercury -99664-07-06 23:16 J -34680665.72 -34680665.53 -34680665.33 0.0061 0.0004

Mercury -99664-10-03 00:42 J -34680577.66 -34680577.47 -34680577.27 0.0061 0.0012

Mercury -99664-12-30 02:08 J -34680489.59 -34680489.41 -34680489.21 0.0061 0.0019

Mercury -99663-03-28 03:35 J -34680401.51 -34680401.35 -34680401.16 0.0061 0.0026

Mercury -99663-06-24 05:16 J -34680313.44 -34680313.28 -34680313.11 0.0061 0.0033

Mercury -99663-09-20 06:56 J -34680225.35 -34680225.21 -34680225.06 0.0061 0.0040

Mercury -99663-12-17 07:54 J -34680137.26 -34680137.17 -34680137.02 0.0061 0.0048

Mercury -99662-03-15 09:35 J -34680049.16 -34680049.10 -34680049.00 0.0061 0.0056

Venus -99657-01-12 11:16 J -34678285.19 -34678285.03 -34678284.85 0.0063 0.0040

Venus -99657-08-24 15:35 J -34678060.07 -34678059.85 -34678059.62 0.0063 0.0005

Venus -99656-04-06 19:25 J -34677834.86 -34677834.69 -34677834.47 0.0063 0.0032

Mars -99651-03-08 17:01 J -34676037.95 -34676037.79 -34676037.62 0.0065 0.0054

Moon -99647-04-03 23:44 J -34674550.75 -34674550.51 -34674550.25 0.0066 0.0025

Earth -99647-04-04 03:06 J -34674550.59 -34674550.37 -34674550.10 0.0066 0.0028 \*

Earth -99646-04-05 19:54 J -34674183.76 -34674183.67 -34674183.51 0.0067 0.0059

Moon -99646-04-05 23:44 J -34674183.65 -34674183.51 -34674183.34 0.0067 0.0055 \*

Mercury -99573-11-29 16:32 J -34647281.84 -34647281.81 -34647281.75 0.0085 0.0080

Mercury -99572-02-25 17:44 J -34647193.82 -34647193.76 -34647193.66 0.0085 0.0067

Mercury -99572-05-24 19:25 J -34647105.79 -34647105.69 -34647105.59 0.0084 0.0053

Mercury -99572-08-20 20:37 J -34647017.75 -34647017.64 -34647017.52 0.0084 0.0040

Mercury -99572-11-16 21:49 J -34646929.71 -34646929.59 -34646929.46 0.0084 0.0027

Mercury -99571-02-12 23:01 J -34646841.66 -34646841.54 -34646841.40 0.0084 0.0014

Mercury -99571-05-12 00:28 J -34646753.62 -34646753.48 -34646753.35 0.0084 0.0002

Mercury -99571-08-08 01:40 J -34646665.56 -34646665.43 -34646665.30 0.0084 0.0012

Mercury -99571-11-04 02:52 J -34646577.51 -34646577.38 -34646577.25 0.0084 0.0025

Mercury -99570-01-31 03:49 J -34646489.45 -34646489.34 -34646489.21 0.0084 0.0038

Mercury -99570-04-29 05:01 J -34646401.38 -34646401.29 -34646401.18 0.0083 0.0050

Mercury -99570-07-26 06:28 J -34646313.32 -34646313.23 -34646313.14 0.0083 0.0063

Mercury -99570-10-22 07:25 J -34646225.23 -34646225.19 -34646225.13 0.0083 0.0075

Venus -99567-02-28 18:42 J -34645364.90 -34645364.72 -34645364.51 0.0082 0.0033

Venus -99567-10-12 04:47 J -34645139.47 -34645139.30 -34645139.10 0.0082 0.0042

Moon -99561-10-05 05:16 J -34642954.51 -34642954.28 -34642954.04 0.0078 0.0022

Earth -99561-10-05 08:23 J -34642954.39 -34642954.15 -34642953.91 0.0078 0.0018 \*

Mercury -99419-06-14 21:20 J -34591201.69 -34591201.61 -34591201.51 0.0060 0.0053

Mercury -99419-09-10 22:47 J -34591113.66 -34591113.55 -34591113.42 0.0060 0.0047

Mercury -99419-12-08 00:28 J -34591025.62 -34591025.48 -34591025.33 0.0060 0.0040

Mercury -99418-03-06 01:54 J -34590937.58 -34590937.42 -34590937.25 0.0060 0.0033

Mercury -99418-06-02 03:20 J -34590849.53 -34590849.36 -34590849.17 0.0060 0.0026

Mercury -99418-08-29 04:47 J -34590761.48 -34590761.30 -34590761.10 0.0060 0.0019

Mercury -99418-11-25 06:28 J -34590673.42 -34590673.23 -34590673.03 0.0060 0.0011

Mercury -99417-02-21 07:54 J -34590585.36 -34590585.17 -34590584.97 0.0061 0.0005

Mercury -99417-05-19 09:35 J -34590497.30 -34590497.10 -34590496.90 0.0061 0.0003

Mercury -99417-08-15 11:01 J -34590409.23 -34590409.04 -34590408.84 0.0061 0.0010

Mercury -99417-11-11 12:13 J -34590321.16 -34590320.99 -34590320.79 0.0061 0.0018

Mercury -99416-02-07 13:40 J -34590233.09 -34590232.93 -34590232.73 0.0061 0.0025

Mercury -99416-05-06 15:20 J -34590145.02 -34590144.86 -34590144.68 0.0061 0.0032

Mercury -99416-08-02 16:47 J -34590056.93 -34590056.80 -34590056.63 0.0061 0.0039

Mercury -99416-10-29 18:28 J -34589968.85 -34589968.73 -34589968.59 0.0061 0.0046

Mercury -99415-01-25 19:40 J -34589880.75 -34589880.68 -34589880.56 0.0061 0.0054

Mercury -99415-04-23 21:49 J -34589792.59 -34589792.59 -34589792.59 0.0061 0.0061

Venus -99411-09-22 06:56 J -34588180.33 -34588180.21 -34588180.05 0.0062 0.0049

Venus -99410-05-05 11:16 J -34587955.24 -34587955.03 -34587954.80 0.0063 0.0014

Venus -99410-12-16 15:35 J -34587730.05 -34587729.85 -34587729.63 0.0063 0.0022

Venus -99409-07-28 19:40 J -34587504.74 -34587504.68 -34587504.57 0.0063 0.0058

Moon -99400-04-05 08:37 J -34584332.37 -34584332.14 -34584331.87 0.0066 0.0030

Earth -99400-04-05 11:59 J -34584332.23 -34584332.00 -34584331.74 0.0066 0.0028 \*

Earth -99399-04-07 05:16 J -34583965.40 -34583965.28 -34583965.15 0.0067 0.0059  
 Moon -99399-04-07 08:52 J -34583965.22 -34583965.13 -34583965.00 0.0067 0.0061 \*  
 Mercury -99326-10-13 04:18 J -34557113.32 -34557113.32 -34557113.30 0.0085 0.0084  
 Mercury -99325-01-09 05:44 J -34557025.33 -34557025.26 -34557025.19 0.0085 0.0071  
 Mercury -99325-04-06 06:56 J -34556937.30 -34556937.21 -34556937.11 0.0084 0.0058  
 Mercury -99325-07-03 08:08 J -34556849.27 -34556849.16 -34556849.05 0.0084 0.0045  
 Mercury -99325-09-29 09:20 J -34556761.23 -34556761.11 -34556760.98 0.0084 0.0032  
 Mercury -99325-12-26 10:32 J -34556673.18 -34556673.06 -34556672.92 0.0084 0.0019  
 Mercury -99324-03-24 11:59 J -34556585.13 -34556585.00 -34556584.87 0.0084 0.0006  
 Mercury -99324-06-20 13:11 J -34556497.08 -34556496.95 -34556496.82 0.0084 0.0007  
 Mercury -99324-09-16 14:23 J -34556409.03 -34556408.90 -34556408.77 0.0084 0.0020  
 Mercury -99324-12-13 15:35 J -34556320.97 -34556320.85 -34556320.73 0.0084 0.0033  
 Mercury -99323-03-11 16:32 J -34556232.91 -34556232.81 -34556232.69 0.0083 0.0046  
 Mercury -99323-06-07 17:59 J -34556144.84 -34556144.75 -34556144.65 0.0083 0.0058  
 Mercury -99323-09-03 18:56 J -34556056.77 -34556056.71 -34556056.63 0.0083 0.0070  
 Mercury -99323-11-30 20:23 J -34555968.66 -34555968.65 -34555968.64 0.0083 0.0082  
 Venus -99321-11-08 11:01 J -34555260.16 -34555260.04 -34555259.88 0.0082 0.0061  
 Venus -99320-06-21 21:35 J -34555034.80 -34555034.60 -34555034.38 0.0082 0.0014  
 Moon -99314-10-07 14:52 J -34552736.11 -34552735.88 -34552735.63 0.0078 0.0016  
 Earth -99314-10-07 18:13 J -34552735.97 -34552735.74 -34552735.48 0.0078 0.0019 \*  
 Mercury -99172-07-24 06:42 J -34500945.29 -34500945.22 -34500945.12 0.0060 0.0054  
 Mercury -99172-10-20 08:08 J -34500857.27 -34500857.16 -34500857.03 0.0060 0.0048  
 Mercury -99171-01-16 09:49 J -34500769.23 -34500769.09 -34500768.94 0.0060 0.0040  
 Mercury -99171-04-14 11:16 J -34500681.19 -34500681.03 -34500680.86 0.0060 0.0033  
 Mercury -99171-07-11 12:42 J -34500593.14 -34500592.97 -34500592.78 0.0060 0.0027  
 Mercury -99171-10-07 14:08 J -34500505.08 -34500504.91 -34500504.71 0.0060 0.0020  
 Mercury -99170-01-03 15:49 J -34500417.03 -34500416.84 -34500416.64 0.0060 0.0012  
 Mercury -99170-04-01 17:16 J -34500328.97 -34500328.78 -34500328.58 0.0060 0.0006  
 Mercury -99170-06-28 18:56 J -34500240.91 -34500240.71 -34500240.51 0.0061 0.0002  
 Mercury -99170-09-24 20:23 J -34500152.84 -34500152.65 -34500152.45 0.0061 0.0009

Mercury -99170-12-21 21:35 J -34500064.77 -34500064.60 -34500064.39 0.0061 0.0017

Mercury -99169-03-18 23:01 J -34499976.70 -34499976.54 -34499976.34 0.0061 0.0024

Mercury -99169-06-15 00:42 J -34499888.63 -34499888.47 -34499888.29 0.0061 0.0031

Mercury -99169-09-11 02:08 J -34499800.55 -34499800.41 -34499800.24 0.0061 0.0038

Mercury -99169-12-08 03:49 J -34499712.46 -34499712.34 -34499712.20 0.0061 0.0045

Mercury -99168-03-06 05:01 J -34499624.36 -34499624.29 -34499624.17 0.0061 0.0053

Mercury -99168-06-02 06:42 J -34499536.23 -34499536.22 -34499536.16 0.0061 0.0060

Venus -99163-01-13 03:06 J -34497850.55 -34497850.37 -34497850.18 0.0063 0.0036

Venus -99163-08-26 07:11 J -34497625.42 -34497625.20 -34497624.97 0.0063 0.0001

Venus -99162-04-08 11:01 J -34497400.21 -34497400.04 -34497399.83 0.0063 0.0035

Mars -99157-11-07 02:08 J -34495360.71 -34495360.41 -34495360.10 0.0065 0.0006

Moon -99153-04-06 10:18 J -34494114.24 -34494114.07 -34494113.86 0.0066 0.0048

Earth -99153-04-06 12:56 J -34494114.14 -34494113.96 -34494113.76 0.0066 0.0047 \*

Earth -99152-04-08 05:44 J -34493747.46 -34493747.26 -34493747.03 0.0067 0.0040

Moon -99152-04-08 09:06 J -34493747.30 -34493747.12 -34493746.88 0.0067 0.0042 \*

Mercury -99078-02-17 16:47 J -34466768.86 -34466768.80 -34466768.73 0.0085 0.0074

Mercury -99078-05-16 17:59 J -34466680.83 -34466680.75 -34466680.65 0.0085 0.0061

Mercury -99078-08-12 19:11 J -34466592.80 -34466592.70 -34466592.58 0.0084 0.0048

Mercury -99078-11-08 20:37 J -34466504.76 -34466504.64 -34466504.52 0.0084 0.0034

Mercury -99077-02-04 21:49 J -34466416.72 -34466416.59 -34466416.46 0.0084 0.0021

Mercury -99077-05-02 23:01 J -34466328.67 -34466328.54 -34466328.41 0.0084 0.0009

Mercury -99077-07-30 00:13 J -34466240.62 -34466240.49 -34466240.35 0.0084 0.0005

Mercury -99077-10-26 01:40 J -34466152.56 -34466152.43 -34466152.30 0.0084 0.0017

Mercury -99076-01-22 02:37 J -34466064.51 -34466064.39 -34466064.26 0.0084 0.0030

Mercury -99076-04-20 03:49 J -34465976.45 -34465976.34 -34465976.22 0.0084 0.0042

Mercury -99076-07-17 05:16 J -34465888.38 -34465888.28 -34465888.18 0.0083 0.0055

Mercury -99076-10-13 06:13 J -34465800.31 -34465800.24 -34465800.16 0.0083 0.0067

Mercury -99075-01-09 07:40 J -34465712.22 -34465712.18 -34465712.15 0.0083 0.0080

Venus -99073-03-01 08:37 J -34464930.32 -34464930.14 -34464929.94 0.0082 0.0038

Venus -99073-10-12 18:42 J -34464704.90 -34464704.72 -34464704.52 0.0082 0.0037

Mars -99069-03-20 04:04 J -34463450.57 -34463450.33 -34463450.03 0.0080 0.0045

Moon -99067-10-08 17:16 J -34462517.98 -34462517.78 -34462517.57 0.0078 0.0046

Earth -99067-10-08 20:08 J -34462517.84 -34462517.66 -34462517.44 0.0078 0.0045 \*

# 99TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 99th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-98925-09-01 15:20 J	-34410688.90	-34410688.86	-34410688.79	0.0060	0.0057		
Mercury	-98925-11-28 16:47 J	-34410600.89	-34410600.80	-34410600.68	0.0060	0.0050		
Mercury	-98924-02-24 18:28 J	-34410512.86	-34410512.73	-34410512.59	0.0060	0.0043		
Mercury	-98924-05-23 19:54 J	-34410424.82	-34410424.67	-34410424.50	0.0060	0.0036		
Mercury	-98924-08-19 21:20 J	-34410336.77	-34410336.61	-34410336.43	0.0060	0.0030		
Mercury	-98924-11-15 23:01 J	-34410248.72	-34410248.54	-34410248.35	0.0060	0.0022		
Mercury	-98923-02-12 00:28 J	-34410160.67	-34410160.48	-34410160.28	0.0060	0.0015		
Mercury	-98923-05-11 01:54 J	-34410072.61	-34410072.42	-34410072.22	0.0060	0.0009		
Mercury	-98923-08-07 03:35 J	-34409984.55	-34409984.35	-34409984.15	0.0060	0.0001		
Mercury	-98923-11-03 05:01 J	-34409896.48	-34409896.29	-34409896.09	0.0061	0.0006		
Mercury	-98922-01-30 06:42 J	-34409808.42	-34409808.22	-34409808.03	0.0061	0.0013		
Mercury	-98922-04-28 08:08 J	-34409720.35	-34409720.16	-34409719.97	0.0061	0.0020		
Mercury	-98922-07-25 09:06 J	-34409632.27	-34409632.12	-34409631.92	0.0061	0.0028		
Mercury	-98922-10-21 10:47 J	-34409544.19	-34409544.05	-34409543.87	0.0061	0.0035		
Mercury	-98921-01-17 12:13 J	-34409456.11	-34409455.99	-34409455.83	0.0061	0.0042		



Mercury -98921-04-14 13:54 J -34409368.02 -34409367.92 -34409367.79 0.0061 0.0049

Mercury -98921-07-11 15:49 J -34409279.91 -34409279.84 -34409279.77 0.0061 0.0056

Venus -98917-09-22 16:47 J -34407745.80 -34407745.80 -34407745.76 0.0062 0.0062

Venus -98916-05-05 21:06 J -34407520.81 -34407520.62 -34407520.40 0.0062 0.0028

Venus -98916-12-17 01:40 J -34407295.66 -34407295.43 -34407295.20 0.0063 0.0008

Venus -98915-07-30 05:44 J -34407070.42 -34407070.26 -34407070.09 0.0063 0.0043

Earth -98905-04-09 04:04 J -34403529.60 -34403529.33 -34403529.07 0.0066 0.0014

Moon -98905-04-09 06:56 J -34403529.46 -34403529.21 -34403528.94 0.0066 0.0011 \*

Mercury -98831-03-29 02:37 J -34376512.39 -34376512.39 -34376512.37 0.0085 0.0084

Mercury -98831-06-25 03:49 J -34376424.40 -34376424.34 -34376424.26 0.0085 0.0071

Mercury -98831-09-21 05:01 J -34376336.37 -34376336.29 -34376336.18 0.0084 0.0059

Mercury -98831-12-18 06:28 J -34376248.33 -34376248.23 -34376248.11 0.0084 0.0045

Mercury -98830-03-16 07:40 J -34376160.29 -34376160.18 -34376160.05 0.0084 0.0032

Mercury -98830-06-12 09:06 J -34376072.25 -34376072.12 -34376071.99 0.0084 0.0019

Mercury -98830-09-08 10:18 J -34375984.20 -34375984.07 -34375983.94 0.0084 0.0006

Mercury -98830-12-05 11:30 J -34375896.15 -34375896.02 -34375895.89 0.0084 0.0007

Mercury -98829-03-02 12:42 J -34375808.09 -34375807.97 -34375807.84 0.0084 0.0020

Mercury -98829-05-29 13:54 J -34375720.04 -34375719.92 -34375719.79 0.0084 0.0032

Mercury -98829-08-25 15:06 J -34375631.98 -34375631.87 -34375631.75 0.0083 0.0045

Mercury -98829-11-21 16:04 J -34375543.91 -34375543.83 -34375543.72 0.0083 0.0058

Mercury -98828-02-17 17:30 J -34375455.84 -34375455.77 -34375455.69 0.0083 0.0069

Mercury -98828-05-16 18:28 J -34375367.73 -34375367.73 -34375367.69 0.0083 0.0082

Venus -98826-06-23 02:08 J -34374600.60 -34374600.41 -34374600.21 0.0082 0.0033

Venus -98825-02-03 11:59 J -34374375.17 -34374375.00 -34374374.80 0.0082 0.0041

Earth -98819-10-11 15:06 J -34371933.07 -34371932.87 -34371932.64 0.0078 0.0040

Moon -98819-10-11 18:13 J -34371932.93 -34371932.74 -34371932.52 0.0078 0.0042 \*

Mercury -98677-01-08 00:42 J -34320344.52 -34320344.47 -34320344.41 0.0060 0.0057

Mercury -98677-04-05 01:25 J -34320256.51 -34320256.44 -34320256.30 0.0060 0.0051

Mercury -98677-07-02 03:06 J -34320168.48 -34320168.37 -34320168.21 0.0060 0.0044

Mercury -98677-09-28 04:32 J -34320080.44 -34320080.31 -34320080.13 0.0060 0.0038

Mercury -98677-12-25 06:13 J -34319992.39 -34319992.24 -34319992.05 0.0060 0.0030

Mercury -98676-03-23 07:40 J -34319904.34 -34319904.18 -34319903.98 0.0060 0.0024

Mercury -98676-06-19 09:35 J -34319816.29 -34319816.10 -34319815.91 0.0060 0.0016

Mercury -98676-09-15 11:01 J -34319728.23 -34319728.04 -34319727.84 0.0060 0.0009

Mercury -98676-12-12 12:28 J -34319640.17 -34319639.98 -34319639.78 0.0060 0.0002

Mercury -98675-03-10 13:54 J -34319552.11 -34319551.92 -34319551.71 0.0061 0.0006

Mercury -98675-06-06 15:20 J -34319464.04 -34319463.86 -34319463.66 0.0061 0.0013

Mercury -98675-09-02 16:47 J -34319375.97 -34319375.80 -34319375.60 0.0061 0.0020

Mercury -98675-11-29 18:28 J -34319287.90 -34319287.73 -34319287.55 0.0061 0.0027

Mercury -98674-02-25 19:54 J -34319199.82 -34319199.67 -34319199.50 0.0061 0.0034

Mercury -98674-05-24 21:06 J -34319111.74 -34319111.62 -34319111.45 0.0061 0.0042

Mercury -98674-08-20 22:32 J -34319023.65 -34319023.56 -34319023.41 0.0061 0.0049

Mercury -98674-11-17 00:13 J -34318935.54 -34318935.49 -34318935.39 0.0061 0.0056

Venus -98669-01-14 08:52 J -34317416.15 -34317416.13 -34317416.07 0.0062 0.0062

Venus -98669-08-26 13:25 J -34317191.14 -34317190.94 -34317190.73 0.0062 0.0027

Venus -98668-04-08 17:30 J -34316965.99 -34316965.77 -34316965.54 0.0063 0.0008

Venus -98668-11-19 21:06 J -34316740.76 -34316740.62 -34316740.43 0.0063 0.0044

Mars -98662-07-08 07:11 J -34314684.47 -34314684.20 -34314683.88 0.0065 0.0019

Earth -98658-04-10 20:37 J -34313311.87 -34313311.64 -34313311.36 0.0066 0.0024

Moon -98658-04-10 23:01 J -34313311.77 -34313311.54 -34313311.27 0.0066 0.0021 \*

Moon -98657-04-11 10:04 J -34312945.14 -34312945.08 -34312944.95 0.0067 0.0063

Earth -98657-04-11 14:23 J -34312944.97 -34312944.90 -34312944.83 0.0067 0.0064 \*

Mercury -98584-10-30 14:23 J -34286079.96 -34286079.90 -34286079.83 0.0085 0.0073

Mercury -98583-01-26 15:49 J -34285991.93 -34285991.84 -34285991.75 0.0084 0.0060

Mercury -98583-04-24 17:01 J -34285903.89 -34285903.79 -34285903.68 0.0084 0.0047

Mercury -98583-07-21 18:28 J -34285815.85 -34285815.73 -34285815.61 0.0084 0.0034

Mercury -98583-10-17 19:40 J -34285727.81 -34285727.68 -34285727.55 0.0084 0.0021

Mercury -98582-01-13 20:52 J -34285639.76 -34285639.63 -34285639.50 0.0084 0.0008

Mercury -98582-04-11 22:04 J -34285551.71 -34285551.58 -34285551.45 0.0084 0.0005

Mercury -98582-07-08 23:16 J -34285463.65 -34285463.53 -34285463.40 0.0084 0.0018

Mercury -98582-10-05 00:28 J -34285375.60 -34285375.48 -34285375.35 0.0084 0.0031

Mercury -98581-01-01 01:54 J -34285287.54 -34285287.42 -34285287.31 0.0083 0.0043

Mercury -98581-03-29 02:52 J -34285199.47 -34285199.38 -34285199.28 0.0083 0.0055

Mercury -98581-06-25 04:18 J -34285111.40 -34285111.32 -34285111.25 0.0083 0.0068

Mercury -98581-09-21 05:16 J -34285023.30 -34285023.28 -34285023.24 0.0083 0.0080

Venus -98579-10-13 17:01 J -34284270.96 -34284270.79 -34284270.58 0.0082 0.0038

Venus -98578-05-27 03:20 J -34284045.54 -34284045.36 -34284045.16 0.0082 0.0037

Mars -98575-11-17 08:08 J -34282775.21 -34282775.16 -34282775.05 0.0080 0.0077

Earth -98572-10-12 08:08 J -34281715.40 -34281715.16 -34281714.91 0.0078 0.0015

Moon -98572-10-12 10:32 J -34281715.28 -34281715.06 -34281714.81 0.0078 0.0019 \*

Mercury -98430-05-15 09:20 J -34230000.14 -34230000.11 -34230000.06 0.0060 0.0058

Mercury -98430-08-11 10:47 J -34229912.14 -34229912.05 -34229911.94 0.0060 0.0051

Mercury -98430-11-07 11:44 J -34229824.11 -34229824.01 -34229823.85 0.0060 0.0045

Mercury -98429-02-03 13:25 J -34229736.07 -34229735.94 -34229735.77 0.0060 0.0038

Mercury -98429-05-01 14:52 J -34229648.03 -34229647.88 -34229647.69 0.0060 0.0031

Mercury -98429-07-28 16:32 J -34229559.98 -34229559.81 -34229559.61 0.0060 0.0024

Mercury -98429-10-24 17:59 J -34229471.92 -34229471.75 -34229471.54 0.0060 0.0017

Mercury -98428-01-20 19:54 J -34229383.87 -34229383.67 -34229383.48 0.0060 0.0010

Mercury -98428-04-18 21:20 J -34229295.81 -34229295.61 -34229295.41 0.0060 0.0003

Mercury -98428-07-15 22:47 J -34229207.75 -34229207.55 -34229207.35 0.0060 0.0004

Mercury -98428-10-12 00:13 J -34229119.68 -34229119.49 -34229119.29 0.0061 0.0012

Mercury -98427-01-08 01:40 J -34229031.61 -34229031.43 -34229031.23 0.0061 0.0019

Mercury -98427-04-06 03:06 J -34228943.54 -34228943.37 -34228943.18 0.0061 0.0026

Mercury -98427-07-03 04:32 J -34228855.46 -34228855.31 -34228855.13 0.0061 0.0033

Mercury -98427-09-29 06:13 J -34228767.38 -34228767.24 -34228767.09 0.0061 0.0040

Mercury -98427-12-26 07:11 J -34228679.29 -34228679.20 -34228679.05 0.0061 0.0048

Mercury -98426-03-24 08:52 J -34228591.19 -34228591.13 -34228591.02 0.0061 0.0055

Venus -98422-05-07 00:13 J -34227086.49 -34227086.49 -34227086.46 0.0062 0.0062

Venus -98422-12-18 04:32 J -34226861.50 -34226861.31 -34226861.10 0.0062 0.0028

Venus -98421-07-30 08:37 J -34226636.35 -34226636.14 -34226635.90 0.0063 0.0008

Venus -98420-03-12 13:11 J -34226411.12 -34226410.95 -34226410.78 0.0063 0.0042

Earth -98411-04-11 13:40 J -34223094.00 -34223093.93 -34223093.80 0.0066 0.0061

Moon -98411-04-11 14:37 J -34223093.95 -34223093.89 -34223093.75 0.0066 0.0062 \*

Moon -98410-04-13 04:04 J -34222727.58 -34222727.33 -34222727.07 0.0067 0.0024

Earth -98410-04-13 06:42 J -34222727.45 -34222727.22 -34222726.95 0.0067 0.0026 \*

Mercury -98336-03-07 00:56 J -34195735.51 -34195735.46 -34195735.41 0.0085 0.0077

Mercury -98336-06-03 02:08 J -34195647.50 -34195647.41 -34195647.33 0.0084 0.0064

Mercury -98336-08-30 03:20 J -34195559.46 -34195559.36 -34195559.25 0.0084 0.0051

Mercury -98336-11-26 04:32 J -34195471.42 -34195471.31 -34195471.19 0.0084 0.0038

Mercury -98335-02-22 05:44 J -34195383.38 -34195383.26 -34195383.13 0.0084 0.0025

Mercury -98335-05-21 07:11 J -34195295.33 -34195295.20 -34195295.07 0.0084 0.0012

Mercury -98335-08-17 08:23 J -34195207.28 -34195207.15 -34195207.02 0.0084 0.0001

Mercury -98335-11-13 09:35 J -34195119.23 -34195119.10 -34195118.97 0.0084 0.0013

Mercury -98334-02-09 10:47 J -34195031.17 -34195031.05 -34195030.92 0.0084 0.0026

Mercury -98334-05-08 11:59 J -34194943.11 -34194943.00 -34194942.88 0.0083 0.0038

Mercury -98334-08-04 12:56 J -34194855.05 -34194854.96 -34194854.84 0.0083 0.0051

Mercury -98334-10-31 14:23 J -34194766.98 -34194766.90 -34194766.81 0.0083 0.0063

Mercury -98333-01-27 15:35 J -34194678.90 -34194678.85 -34194678.79 0.0083 0.0076

Venus -98331-02-03 07:11 J -34193941.36 -34193941.20 -34193941.02 0.0082 0.0048

Venus -98331-09-16 17:16 J -34193715.97 -34193715.78 -34193715.57 0.0082 0.0026

Earth -98325-10-12 22:18 J -34191497.58 -34191497.57 -34191497.51 0.0078 0.0078

Moon -98325-10-13 00:13 J -34191497.53 -34191497.49 -34191497.41 0.0078 0.0075 \*

Moon -98324-10-14 18:28 J -34191130.90 -34191130.73 -34191130.52 0.0078 0.0051

Earth -98324-10-14 21:49 J -34191130.76 -34191130.59 -34191130.40 0.0078 0.0053 \*

Mercury -98183-12-16 18:13 J -34139567.79 -34139567.74 -34139567.65 0.0060 0.0056

Mercury -98182-03-14 19:40 J -34139479.77 -34139479.68 -34139479.55 0.0060 0.0049

Mercury -98182-06-10 21:20 J -34139391.74 -34139391.61 -34139391.46 0.0060 0.0042

Mercury -98182-09-06 22:47 J -34139303.70 -34139303.55 -34139303.38 0.0060 0.0036

Mercury -98182-12-04 00:28 J -34139215.65 -34139215.48 -34139215.30 0.0060 0.0028

Mercury -98181-03-01 01:54 J -34139127.60 -34139127.42 -34139127.23 0.0060 0.0022

Mercury -98181-05-28 03:20 J -34139039.54 -34139039.36 -34139039.16 0.0060 0.0015

Mercury -98181-08-24 05:01 J -34138951.48 -34138951.29 -34138951.09 0.0060 0.0007

Mercury -98181-11-20 06:28 J -34138863.42 -34138863.23 -34138863.03 0.0060 0.0001

Mercury -98180-02-16 07:54 J -34138775.36 -34138775.17 -34138774.97 0.0061 0.0007

Mercury -98180-05-15 09:20 J -34138687.29 -34138687.11 -34138686.91 0.0061 0.0014

Mercury -98180-08-11 11:01 J -34138599.22 -34138599.04 -34138598.85 0.0061 0.0021

Mercury -98180-11-07 12:28 J -34138511.15 -34138510.98 -34138510.80 0.0061 0.0028

Mercury -98179-02-03 14:08 J -34138423.07 -34138422.91 -34138422.75 0.0061 0.0035

Mercury -98179-05-02 15:06 J -34138334.99 -34138334.87 -34138334.71 0.0061 0.0043

Mercury -98179-07-29 16:32 J -34138246.90 -34138246.81 -34138246.67 0.0061 0.0050

Mercury -98179-10-25 18:13 J -34138158.79 -34138158.74 -34138158.65 0.0061 0.0057

Venus -98174-04-09 17:59 J -34136531.93 -34136531.75 -34136531.56 0.0062 0.0036

Venus -98174-11-20 22:18 J -34136306.80 -34136306.57 -34136306.34 0.0063 0.0001

Venus -98173-07-03 02:08 J -34136081.59 -34136081.41 -34136081.20 0.0063 0.0034

Moon -98163-04-13 17:01 J -34132510.03 -34132509.79 -34132509.50 0.0066 0.0021

Earth -98163-04-13 19:40 J -34132509.92 -34132509.68 -34132509.42 0.0066 0.0024 \*

Earth -98162-04-15 12:13 J -34132143.02 -34132142.99 -34132142.88 0.0067 0.0065

Moon -98162-04-15 16:04 J -34132142.93 -34132142.83 -34132142.72 0.0067 0.0061 \*

Mercury -98089-10-08 11:30 J -34105303.08 -34105303.02 -34105302.94 0.0085 0.0072

Mercury -98088-01-04 12:56 J -34105215.05 -34105214.96 -34105214.86 0.0084 0.0059

Mercury -98088-04-02 14:08 J -34105127.01 -34105126.91 -34105126.79 0.0084 0.0046

Mercury -98088-06-29 15:35 J -34105038.97 -34105038.85 -34105038.73 0.0084 0.0033

Mercury -98088-09-25 16:47 J -34104950.93 -34104950.80 -34104950.67 0.0084 0.0020

Mercury -98088-12-22 17:59 J -34104862.88 -34104862.75 -34104862.62 0.0084 0.0007

Mercury -98087-03-20 19:11 J -34104774.83 -34104774.70 -34104774.56 0.0084 0.0006

Mercury -98087-06-16 20:23 J -34104686.77 -34104686.65 -34104686.52 0.0084 0.0019

Mercury -98087-09-12 21:35 J -34104598.72 -34104598.60 -34104598.47 0.0084 0.0031

Mercury -98087-12-09 22:47 J -34104510.66 -34104510.55 -34104510.43 0.0083 0.0044

Mercury -98086-03-07 23:44 J -34104422.59 -34104422.51 -34104422.40 0.0083 0.0057

Mercury -98086-06-04 01:11 J -34104334.52 -34104334.45 -34104334.37 0.0083 0.0068

Mercury -98086-08-31 02:23 J -34104246.42 -34104246.40 -34104246.36 0.0083 0.0081

Venus -98084-05-26 18:56 J -34103611.82 -34103611.71 -34103611.57 0.0082 0.0066

Venus -98083-01-07 05:30 J -34103386.49 -34103386.27 -34103386.06 0.0082 0.0008

Venus -98083-08-20 15:35 J -34103160.87 -34103160.85 -34103160.83 0.0081 0.0081

Moon -98077-10-15 08:08 J -34100913.40 -34100913.16 -34100912.91 0.0078 0.0017

Earth -98077-10-15 10:32 J -34100913.29 -34100913.06 -34100912.81 0.0078 0.0016 \*

# 98TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 98th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-97935-07-20 02:51 J	-34049135.44	-34049135.38	-34049135.28	0.0060	0.0055		
Mercury	-97935-10-16 04:18 J	-34049047.41	-34049047.32	-34049047.18	0.0060	0.0048		
Mercury	-97934-01-12 05:59 J	-34048959.38	-34048959.25	-34048959.09	0.0060	0.0041		
Mercury	-97934-04-10 07:25 J	-34048871.34	-34048871.19	-34048871.01	0.0060	0.0035		
Mercury	-97934-07-07 09:06 J	-34048783.29	-34048783.12	-34048782.94	0.0060	0.0027		
Mercury	-97934-10-03 10:32 J	-34048695.24	-34048695.06	-34048694.86	0.0060	0.0021		
Mercury	-97934-12-30 12:13 J	-34048607.18	-34048606.99	-34048606.79	0.0060	0.0013		
Mercury	-97933-03-27 13:39 J	-34048519.12	-34048518.93	-34048518.73	0.0060	0.0007		
Mercury	-97933-06-23 15:20 J	-34048431.06	-34048430.86	-34048430.67	0.0060	0.0001		
Mercury	-97933-09-19 16:47 J	-34048343.00	-34048342.80	-34048342.60	0.0061	0.0008		
Mercury	-97933-12-16 18:13 J	-34048254.93	-34048254.74	-34048254.55	0.0061	0.0015		
Mercury	-97932-03-14 19:39 J	-34048166.86	-34048166.68	-34048166.49	0.0061	0.0022		

Mercury -97932-06-10 21:06 J -34048078.78 -34048078.62 -34048078.44 0.0061 0.0029  
 Mercury -97932-09-06 22:47 J -34047990.71 -34047990.55 -34047990.39 0.0061 0.0036  
 Mercury -97932-12-03 23:44 J -34047902.62 -34047902.51 -34047902.35 0.0061 0.0044  
 Mercury -97931-03-02 01:11 J -34047814.53 -34047814.45 -34047814.31 0.0061 0.0051  
 Mercury -97931-05-29 02:51 J -34047726.42 -34047726.38 -34047726.30 0.0061 0.0058  
 Venus -97927-07-31 05:59 J -34046202.38 -34046202.25 -34046202.08 0.0062 0.0046  
 Venus -97926-03-13 10:03 J -34045977.29 -34045977.08 -34045976.84 0.0062 0.0013  
 Venus -97926-10-24 14:23 J -34045752.10 -34045751.90 -34045751.68 0.0063 0.0023  
 Venus -97925-06-05 18:27 J -34045526.80 -34045526.73 -34045526.62 0.0063 0.0058  
 Mars -97919-06-16 01:54 J -34043325.72 -34043325.42 -34043325.11 0.0065 0.0006  
 Earth -97915-04-15 23:44 J -34041925.77 -34041925.51 -34041925.23 0.0066 0.0011  
 Moon -97915-04-16 02:23 J -34041925.65 -34041925.40 -34041925.14 0.0066 0.0013 \*  
 Mercury -97841-02-13 20:37 J -34014958.64 -34014958.64 -34014958.63 0.0085 0.0084  
 Mercury -97841-05-11 21:49 J -34014870.65 -34014870.59 -34014870.51 0.0085 0.0071  
 Mercury -97841-08-07 23:01 J -34014782.62 -34014782.54 -34014782.43 0.0084 0.0059  
 Mercury -97841-11-04 00:27 J -34014694.59 -34014694.48 -34014694.37 0.0084 0.0045  
 Mercury -97840-01-31 01:39 J -34014606.55 -34014606.43 -34014606.30 0.0084 0.0032  
 Mercury -97840-04-29 03:06 J -34014518.50 -34014518.37 -34014518.24 0.0084 0.0020  
 Mercury -97840-07-26 04:18 J -34014430.45 -34014430.32 -34014430.19 0.0084 0.0007  
 Mercury -97840-10-22 05:30 J -34014342.40 -34014342.27 -34014342.14 0.0084 0.0006  
 Mercury -97839-01-18 06:42 J -34014254.35 -34014254.22 -34014254.09 0.0084 0.0019  
 Mercury -97839-04-16 07:39 J -34014166.29 -34014166.18 -34014166.05 0.0084 0.0032  
 Mercury -97839-07-13 09:06 J -34014078.23 -34014078.12 -34014078.01 0.0083 0.0044  
 Mercury -97839-10-09 10:03 J -34013990.16 -34013990.08 -34013989.97 0.0083 0.0056  
 Mercury -97838-01-05 11:15 J -34013902.09 -34013902.03 -34013901.94 0.0083 0.0069  
 Mercury -97838-04-03 12:42 J -34013814.00 -34013813.97 -34013813.94 0.0083 0.0080  
 Venus -97836-04-29 14:37 J -34013057.09 -34013056.89 -34013056.67 0.0082 0.0022  
 Venus -97836-12-11 00:42 J -34012831.62 -34012831.47 -34012831.29 0.0082 0.0052  
 Mars -97832-10-25 10:03 J -34011417.37 -34011417.08 -34011416.76 0.0079 0.0024  
 Earth -97829-10-17 17:59 J -34010328.96 -34010328.75 -34010328.51 0.0078 0.0033

Moon -97829-10-17 21:06 J -34010328.83 -34010328.62 -34010328.38 0.0078 0.0029 \*  
 Mercury -97687-02-20 10:03 J -33958703.10 -33958703.08 -33958703.00 0.0060 0.0058  
 Mercury -97687-05-19 11:44 J -33958615.09 -33958615.01 -33958614.89 0.0060 0.0051  
 Mercury -97687-08-15 13:11 J -33958527.06 -33958526.95 -33958526.80 0.0060 0.0044  
 Mercury -97687-11-11 14:51 J -33958439.02 -33958438.88 -33958438.71 0.0060 0.0037  
 Mercury -97686-02-07 16:18 J -33958350.98 -33958350.82 -33958350.63 0.0060 0.0031  
 Mercury -97686-05-06 17:59 J -33958262.93 -33958262.75 -33958262.56 0.0060 0.0023  
 Mercury -97686-08-02 19:25 J -33958174.87 -33958174.69 -33958174.49 0.0060 0.0017  
 Mercury -97686-10-29 21:06 J -33958086.81 -33958086.62 -33958086.42 0.0060 0.0009  
 Mercury -97685-01-25 22:32 J -33957998.75 -33957998.56 -33957998.36 0.0060 0.0003  
 Mercury -97685-04-23 00:13 J -33957910.69 -33957910.49 -33957910.30 0.0060 0.0005  
 Mercury -97685-07-20 01:25 J -33957822.62 -33957822.44 -33957822.24 0.0061 0.0012  
 Mercury -97685-10-16 02:51 J -33957734.55 -33957734.38 -33957734.18 0.0061 0.0019  
 Mercury -97684-01-12 04:32 J -33957646.48 -33957646.31 -33957646.12 0.0061 0.0026  
 Mercury -97684-04-10 05:59 J -33957558.41 -33957558.25 -33957558.07 0.0061 0.0033  
 Mercury -97684-07-07 07:39 J -33957470.32 -33957470.18 -33957470.03 0.0061 0.0040  
 Mercury -97684-10-03 09:20 J -33957382.23 -33957382.11 -33957381.99 0.0061 0.0047  
 Mercury -97684-12-30 10:03 J -33957294.13 -33957294.08 -33957293.96 0.0061 0.0055  
 Venus -97679-07-03 20:08 J -33955647.85 -33955647.66 -33955647.45 0.0062 0.0031  
 Venus -97678-02-14 00:42 J -33955422.70 -33955422.47 -33955422.24 0.0063 0.0004  
 Venus -97678-09-27 04:18 J -33955197.47 -33955197.32 -33955197.12 0.0063 0.0039  
 Mars -97671-09-24 22:03 J -33952642.59 -33952642.58 -33952642.47 0.0065 0.0065  
 Earth -97668-04-16 06:13 J -33951708.37 -33951708.24 -33951708.06 0.0066 0.0055  
 Moon -97668-04-16 08:23 J -33951708.29 -33951708.15 -33951707.99 0.0066 0.0054 \*  
 Moon -97667-04-17 19:54 J -33951341.89 -33951341.67 -33951341.41 0.0067 0.0032  
 Earth -97667-04-17 23:30 J -33951341.74 -33951341.52 -33951341.27 0.0067 0.0033 \*  
 Mercury -97594-12-14 07:25 J -33924438.24 -33924438.19 -33924438.13 0.0085 0.0076  
 Mercury -97593-03-11 08:37 J -33924350.22 -33924350.14 -33924350.05 0.0084 0.0063  
 Mercury -97593-06-07 10:03 J -33924262.19 -33924262.08 -33924261.97 0.0084 0.0050  
 Mercury -97593-09-03 11:01 J -33924174.15 -33924174.04 -33924173.91 0.0084 0.0037



Mercury -97593-11-30 12:27 J -33924086.10 -33924085.98 -33924085.85 0.0084 0.0024

Mercury -97592-02-26 13:39 J -33923998.06 -33923997.93 -33923997.80 0.0084 0.0011

Mercury -97592-05-25 15:06 J -33923910.01 -33923909.87 -33923909.74 0.0084 0.0003

Mercury -97592-08-21 16:03 J -33923821.95 -33923821.83 -33923821.69 0.0084 0.0015

Mercury -97592-11-17 17:15 J -33923733.90 -33923733.78 -33923733.65 0.0084 0.0027

Mercury -97591-02-13 18:27 J -33923645.84 -33923645.73 -33923645.61 0.0083 0.0039

Mercury -97591-05-12 19:39 J -33923557.78 -33923557.68 -33923557.57 0.0083 0.0052

Mercury -97591-08-08 20:37 J -33923469.71 -33923469.64 -33923469.54 0.0083 0.0065

Mercury -97591-11-04 22:03 J -33923381.62 -33923381.58 -33923381.52 0.0083 0.0076

Venus -97589-08-19 21:20 J -33922727.73 -33922727.61 -33922727.45 0.0082 0.0062

Venus -97588-04-02 07:54 J -33922502.38 -33922502.17 -33922501.96 0.0082 0.0012

Earth -97582-10-18 23:01 J -33920111.68 -33920111.54 -33920111.36 0.0078 0.0060

Moon -97582-10-19 01:54 J -33920111.56 -33920111.42 -33920111.24 0.0078 0.0059 \*

Moon -97581-10-19 18:56 J -33919744.81 -33919744.71 -33919744.58 0.0077 0.0069

Earth -97581-10-19 21:49 J -33919744.66 -33919744.59 -33919744.46 0.0077 0.0071 \*

Mercury -97440-12-20 18:13 J -33868182.78 -33868182.74 -33868182.63 0.0060 0.0056

Mercury -97439-03-18 19:54 J -33868094.76 -33868094.67 -33868094.53 0.0060 0.0049

Mercury -97439-06-14 21:35 J -33868006.72 -33868006.60 -33868006.44 0.0060 0.0042

Mercury -97439-09-10 23:01 J -33867918.68 -33867918.54 -33867918.36 0.0060 0.0035

Mercury -97439-12-08 00:42 J -33867830.63 -33867830.47 -33867830.29 0.0060 0.0028

Mercury -97438-03-06 02:08 J -33867742.58 -33867742.41 -33867742.21 0.0060 0.0022

Mercury -97438-06-02 03:49 J -33867654.53 -33867654.34 -33867654.14 0.0060 0.0014

Mercury -97438-08-29 05:15 J -33867566.47 -33867566.28 -33867566.08 0.0060 0.0008

Mercury -97438-11-25 06:56 J -33867478.41 -33867478.21 -33867478.01 0.0060 0.0001

Mercury -97437-02-21 08:23 J -33867390.34 -33867390.15 -33867389.95 0.0060 0.0007

Mercury -97437-05-19 09:49 J -33867302.28 -33867302.09 -33867301.89 0.0061 0.0014

Mercury -97437-08-15 11:15 J -33867214.21 -33867214.03 -33867213.84 0.0061 0.0021

Mercury -97437-11-11 12:42 J -33867126.13 -33867125.97 -33867125.78 0.0061 0.0028

Mercury -97436-02-07 14:08 J -33867038.06 -33867037.91 -33867037.73 0.0061 0.0035

Mercury -97436-05-06 15:49 J -33866949.97 -33866949.84 -33866949.69 0.0061 0.0042

Mercury -97436-08-02 17:30 J -33866861.88 -33866861.77 -33866861.65 0.0061 0.0049  
 Mercury -97436-10-29 18:27 J -33866773.77 -33866773.73 -33866773.63 0.0061 0.0057  
 Venus -97432-10-24 04:32 J -33865318.40 -33865318.31 -33865318.17 0.0062 0.0053  
 Venus -97431-06-06 08:51 J -33865093.34 -33865093.13 -33865092.90 0.0062 0.0019  
 Venus -97430-01-17 12:56 J -33864868.16 -33864867.96 -33864867.72 0.0063 0.0016  
 Venus -97430-08-30 17:15 J -33864642.90 -33864642.78 -33864642.63 0.0063 0.0050  
 Moon -97420-04-17 23:59 J -33861124.71 -33861124.50 -33861124.25 0.0066 0.0036  
 Earth -97420-04-18 02:51 J -33861124.57 -33861124.38 -33861124.14 0.0066 0.0039 \*  
 Earth -97419-04-19 19:54 J -33860757.84 -33860757.67 -33860757.47 0.0067 0.0049  
 Moon -97419-04-19 23:15 J -33860757.69 -33860757.53 -33860757.30 0.0067 0.0046 \*  
 Mercury -97346-10-13 17:01 J -33833917.84 -33833917.79 -33833917.72 0.0085 0.0074  
 Mercury -97345-01-09 18:27 J -33833829.82 -33833829.73 -33833829.64 0.0084 0.0061  
 Mercury -97345-04-06 19:25 J -33833741.78 -33833741.69 -33833741.57 0.0084 0.0048  
 Mercury -97345-07-03 20:51 J -33833653.75 -33833653.63 -33833653.51 0.0084 0.0035  
 Mercury -97345-09-29 22:03 J -33833565.70 -33833565.58 -33833565.45 0.0084 0.0022  
 Mercury -97345-12-26 23:30 J -33833477.65 -33833477.52 -33833477.39 0.0084 0.0010  
 Mercury -97344-03-25 00:42 J -33833389.60 -33833389.47 -33833389.34 0.0084 0.0003  
 Mercury -97344-06-21 01:54 J -33833301.55 -33833301.42 -33833301.29 0.0084 0.0016  
 Mercury -97344-09-17 02:51 J -33833213.49 -33833213.38 -33833213.25 0.0084 0.0029  
 Mercury -97344-12-14 04:18 J -33833125.43 -33833125.32 -33833125.20 0.0083 0.0041  
 Mercury -97343-03-12 05:15 J -33833037.37 -33833037.28 -33833037.17 0.0083 0.0053  
 Mercury -97343-06-08 06:27 J -33832949.30 -33832949.23 -33832949.14 0.0083 0.0065  
 Mercury -97343-09-04 07:54 J -33832861.21 -33832861.17 -33832861.12 0.0083 0.0077  
 Venus -97341-07-23 11:01 J -33832173.20 -33832173.04 -33832172.84 0.0082 0.0044  
 Venus -97340-03-05 21:20 J -33831947.80 -33831947.61 -33831947.40 0.0082 0.0030  
 Moon -97334-10-20 19:39 J -33829527.89 -33829527.68 -33829527.46 0.0078 0.0041  
 Earth -97334-10-20 22:18 J -33829527.77 -33829527.57 -33829527.34 0.0078 0.0039 \*  
 Mercury -97192-10-20 01:54 J -33777662.47 -33777662.42 -33777662.36 0.0060 0.0057  
 Mercury -97191-01-16 02:51 J -33777574.46 -33777574.38 -33777574.25 0.0060 0.0051  
 Mercury -97191-04-14 04:32 J -33777486.42 -33777486.31 -33777486.16 0.0060 0.0044

Mercury -97191-07-11 05:59 J -33777398.38 -33777398.25 -33777398.07 0.0060 0.0037

Mercury -97191-10-07 07:39 J -33777310.34 -33777310.18 -33777310.00 0.0060 0.0030

Mercury -97190-01-03 09:06 J -33777222.29 -33777222.12 -33777221.92 0.0060 0.0024

Mercury -97190-04-01 10:47 J -33777134.23 -33777134.05 -33777133.85 0.0060 0.0016

Mercury -97190-06-28 12:13 J -33777046.18 -33777045.99 -33777045.79 0.0060 0.0010

Mercury -97190-09-24 13:54 J -33776958.12 -33776957.92 -33776957.72 0.0060 0.0002

Mercury -97190-12-21 15:20 J -33776870.05 -33776869.86 -33776869.66 0.0060 0.0005

Mercury -97189-03-18 16:47 J -33776781.99 -33776781.80 -33776781.60 0.0061 0.0012

Mercury -97189-06-14 18:13 J -33776693.92 -33776693.74 -33776693.54 0.0061 0.0019

Mercury -97189-09-10 19:39 J -33776605.84 -33776605.68 -33776605.49 0.0061 0.0026

Mercury -97189-12-07 21:20 J -33776517.77 -33776517.61 -33776517.44 0.0061 0.0033

Mercury -97188-03-05 22:47 J -33776429.69 -33776429.55 -33776429.39 0.0061 0.0040

Mercury -97188-06-02 00:27 J -33776341.60 -33776341.48 -33776341.35 0.0061 0.0047

Mercury -97188-08-29 01:25 J -33776253.50 -33776253.44 -33776253.32 0.0061 0.0055

Venus -97184-09-26 15:20 J -33774763.99 -33774763.86 -33774763.71 0.0062 0.0049

Venus -97183-05-09 19:39 J -33774538.90 -33774538.68 -33774538.46 0.0062 0.0015

Venus -97183-12-20 23:30 J -33774313.73 -33774313.52 -33774313.29 0.0063 0.0020

Venus -97182-08-03 03:06 J -33774088.45 -33774088.37 -33774088.22 0.0063 0.0055

Earth -97172-04-19 19:54 J -33770540.89 -33770540.67 -33770540.43 0.0066 0.0034

Moon -97172-04-19 23:44 J -33770540.73 -33770540.51 -33770540.27 0.0066 0.0033 \*

Moon -97171-04-21 09:20 J -33770174.25 -33770174.11 -33770173.94 0.0067 0.0054

Earth -97171-04-21 12:27 J -33770174.10 -33770173.98 -33770173.80 0.0067 0.0055 \*

Mercury -97098-08-13 02:08 J -33743397.46 -33743397.41 -33743397.35 0.0085 0.0076

Mercury -97098-11-09 03:35 J -33743309.44 -33743309.35 -33743309.26 0.0084 0.0063

Mercury -97097-02-05 04:32 J -33743221.40 -33743221.31 -33743221.19 0.0084 0.0051

Mercury -97097-05-03 05:59 J -33743133.36 -33743133.25 -33743133.13 0.0084 0.0037

Mercury -97097-07-30 07:25 J -33743045.32 -33743045.19 -33743045.07 0.0084 0.0024

Mercury -97097-10-26 08:37 J -33742957.27 -33742957.14 -33742957.01 0.0084 0.0012

Mercury -97096-01-22 09:49 J -33742869.22 -33742869.09 -33742868.96 0.0084 0.0001

Mercury -97096-04-20 11:01 J -33742781.17 -33742781.04 -33742780.91 0.0084 0.0013

Mercury	-97096-07-17 12:13 J	-33742693.11	-33742692.99	-33742692.86	0.0084	0.0026
Mercury	-97096-10-13 13:11 J	-33742605.06	-33742604.95	-33742604.82	0.0083	0.0039
Mercury	-97095-01-09 14:37 J	-33742516.99	-33742516.89	-33742516.78	0.0083	0.0051
Mercury	-97095-04-07 15:35 J	-33742428.92	-33742428.85	-33742428.75	0.0083	0.0063
Mercury	-97095-07-04 16:47 J	-33742340.84	-33742340.80	-33742340.74	0.0083	0.0075
Venus	-97093-06-25 23:01 J	-33741618.73	-33741618.54	-33741618.34	0.0082	0.0034
Venus	-97092-02-06 08:51 J	-33741393.30	-33741393.13	-33741392.93	0.0082	0.0039
Earth	-97086-10-22 18:27 J	-33738943.96	-33738943.73	-33738943.49	0.0078	0.0026
Moon	-97086-10-22 21:49 J	-33738943.81	-33738943.59	-33738943.36	0.0078	0.0030 *

# 97TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 97th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-96944-11-15 09:35 J	-33687054.16	-33687054.10	-33687054.00	0.0060	0.0054		
Mercury	-96943-02-11 11:15 J	-33686966.14	-33686966.03	-33686965.90	0.0060	0.0047		
Mercury	-96943-05-10 12:42 J	-33686878.10	-33686877.97	-33686877.81	0.0060	0.0040		
Mercury	-96943-08-06 14:23 J	-33686790.06	-33686789.90	-33686789.73	0.0060	0.0034		
Mercury	-96943-11-02 15:35 J	-33686702.01	-33686701.85	-33686701.66	0.0060	0.0027		
Mercury	-96942-01-29 17:01 J	-33686613.96	-33686613.79	-33686613.59	0.0060	0.0020		
Mercury	-96942-04-27 18:42 J	-33686525.90	-33686525.72	-33686525.52	0.0060	0.0013		
Mercury	-96942-07-24 20:08 J	-33686437.85	-33686437.66	-33686437.45	0.0060	0.0007		
Mercury	-96942-10-20 21:49 J	-33686349.78	-33686349.59	-33686349.39	0.0060	0.0001		

Mercury -96941-01-16 23:15 J -33686261.72 -33686261.53 -33686261.33 0.0060 0.0008

Mercury -96941-04-14 00:56 J -33686173.65 -33686173.46 -33686173.27 0.0061 0.0015

Mercury -96941-07-11 02:23 J -33686085.58 -33686085.40 -33686085.21 0.0061 0.0022

Mercury -96941-10-07 03:49 J -33685997.51 -33685997.34 -33685997.16 0.0061 0.0029

Mercury -96940-01-03 05:30 J -33685909.43 -33685909.27 -33685909.11 0.0061 0.0036

Mercury -96940-04-01 06:27 J -33685821.34 -33685821.23 -33685821.07 0.0061 0.0044

Mercury -96940-06-28 07:54 J -33685733.25 -33685733.17 -33685733.03 0.0061 0.0051

Mercury -96940-09-24 09:35 J -33685645.14 -33685645.10 -33685645.02 0.0061 0.0058

Venus -96936-08-30 00:13 J -33684209.61 -33684209.49 -33684209.32 0.0062 0.0048

Venus -96935-04-12 04:32 J -33683984.52 -33683984.31 -33683984.08 0.0062 0.0015

Venus -96935-11-23 08:37 J -33683759.35 -33683759.14 -33683758.91 0.0063 0.0020

Venus -96934-07-06 12:13 J -33683534.07 -33683533.99 -33683533.84 0.0063 0.0055

Mars -96928-08-30 20:51 J -33681286.80 -33681286.63 -33681286.45 0.0065 0.0053

Moon -96924-04-21 06:13 J -33679957.46 -33679957.24 -33679957.02 0.0066 0.0038

Earth -96924-04-21 09:06 J -33679957.32 -33679957.12 -33679956.86 0.0066 0.0036 \*

Earth -96923-04-23 02:08 J -33679590.54 -33679590.41 -33679590.22 0.0067 0.0054

Moon -96923-04-23 05:59 J -33679590.39 -33679590.25 -33679590.09 0.0067 0.0056 \*

Mercury -96850-09-08 11:30 J -33652789.09 -33652789.02 -33652788.95 0.0084 0.0072

Mercury -96850-12-05 12:27 J -33652701.06 -33652700.98 -33652700.87 0.0084 0.0060

Mercury -96849-03-02 13:54 J -33652613.02 -33652612.92 -33652612.80 0.0084 0.0046

Mercury -96849-05-29 15:20 J -33652524.98 -33652524.86 -33652524.74 0.0084 0.0033

Mercury -96849-08-25 16:32 J -33652436.94 -33652436.81 -33652436.68 0.0084 0.0021

Mercury -96849-11-21 17:44 J -33652348.89 -33652348.76 -33652348.63 0.0084 0.0008

Mercury -96848-02-17 18:56 J -33652260.84 -33652260.71 -33652260.57 0.0084 0.0005

Mercury -96848-05-16 20:08 J -33652172.78 -33652172.66 -33652172.53 0.0084 0.0017

Mercury -96848-08-12 21:20 J -33652084.73 -33652084.61 -33652084.48 0.0083 0.0030

Mercury -96848-11-08 22:18 J -33651996.67 -33651996.57 -33651996.44 0.0083 0.0043

Mercury -96847-02-04 23:44 J -33651908.60 -33651908.51 -33651908.40 0.0083 0.0054

Mercury -96847-05-04 00:56 J -33651820.53 -33651820.46 -33651820.38 0.0083 0.0066

Mercury -96847-07-31 02:08 J -33651732.44 -33651732.41 -33651732.36 0.0083 0.0078

Venus	-96845-05-29 06:27 J	-33651064.40	-33651064.23	-33651064.03	0.0082	0.0041
Venus	-96844-01-09 17:01 J	-33650838.99	-33650838.79	-33650838.59	0.0082	0.0032
Moon	-96838-10-24 05:44 J	-33648360.48	-33648360.26	-33648360.03	0.0078	0.0030
Earth	-96838-10-24 08:51 J	-33648360.34	-33648360.13	-33648359.88	0.0078	0.0031 *
Mercury	-96696-12-11 16:32 J	-33596445.87	-33596445.81	-33596445.70	0.0060	0.0054
Mercury	-96695-03-09 17:59 J	-33596357.85	-33596357.75	-33596357.60	0.0060	0.0047
Mercury	-96695-06-05 19:39 J	-33596269.81	-33596269.68	-33596269.52	0.0060	0.0040
Mercury	-96695-09-01 21:20 J	-33596181.77	-33596181.61	-33596181.44	0.0060	0.0033
Mercury	-96695-11-28 22:47 J	-33596093.72	-33596093.55	-33596093.36	0.0060	0.0026
Mercury	-96694-02-25 00:27 J	-33596005.67	-33596005.48	-33596005.29	0.0060	0.0020
Mercury	-96694-05-24 01:54 J	-33595917.61	-33595917.42	-33595917.22	0.0060	0.0013
Mercury	-96694-08-20 03:20 J	-33595829.55	-33595829.36	-33595829.16	0.0060	0.0006
Mercury	-96694-11-16 05:01 J	-33595741.49	-33595741.29	-33595741.10	0.0060	0.0002
Mercury	-96693-02-12 06:13 J	-33595653.43	-33595653.24	-33595653.03	0.0060	0.0009
Mercury	-96693-05-10 07:39 J	-33595565.36	-33595565.18	-33595564.98	0.0061	0.0016
Mercury	-96693-08-06 09:06 J	-33595477.29	-33595477.12	-33595476.92	0.0061	0.0023
Mercury	-96693-11-02 10:32 J	-33595389.21	-33595389.06	-33595388.87	0.0061	0.0030
Mercury	-96692-01-29 11:59 J	-33595301.13	-33595301.00	-33595300.82	0.0061	0.0037
Mercury	-96692-04-27 13:25 J	-33595213.05	-33595212.94	-33595212.78	0.0061	0.0044
Mercury	-96692-07-24 15:06 J	-33595124.96	-33595124.87	-33595124.74	0.0061	0.0051
Mercury	-96692-10-20 16:32 J	-33595036.84	-33595036.81	-33595036.73	0.0061	0.0058
Venus	-96688-08-02 07:11 J	-33593655.28	-33593655.20	-33593655.04	0.0062	0.0054
Venus	-96687-03-15 11:44 J	-33593430.21	-33593430.01	-33593429.78	0.0062	0.0020
Venus	-96687-10-26 16:03 J	-33593205.05	-33593204.83	-33593204.60	0.0062	0.0015
Venus	-96686-06-08 20:08 J	-33592979.79	-33592979.66	-33592979.51	0.0063	0.0049
Mars	-96680-12-08 22:18 J	-33590604.80	-33590604.57	-33590604.31	0.0065	0.0039
Earth	-96676-04-22 20:23 J	-33589373.83	-33589373.65	-33589373.43	0.0066	0.0044
Moon	-96676-04-22 23:44 J	-33589373.68	-33589373.51	-33589373.29	0.0066	0.0047 *
Moon	-96675-04-24 11:30 J	-33589007.18	-33589007.02	-33589006.81	0.0067	0.0048
Earth	-96675-04-24 13:54 J	-33589007.11	-33589006.92	-33589006.72	0.0067	0.0045 *

Mercury -96602-07-08 19:11 J -33562268.72 -33562268.70 -33562268.68 0.0085 0.0083

Mercury -96602-10-04 20:08 J -33562180.72 -33562180.66 -33562180.57 0.0084 0.0071

Mercury -96602-12-31 21:35 J -33562092.69 -33562092.60 -33562092.50 0.0084 0.0057

Mercury -96601-03-28 22:47 J -33562004.65 -33562004.55 -33562004.43 0.0084 0.0045

Mercury -96601-06-25 00:13 J -33561916.61 -33561916.49 -33561916.36 0.0084 0.0032

Mercury -96601-09-21 01:25 J -33561828.56 -33561828.44 -33561828.31 0.0084 0.0019

Mercury -96601-12-18 02:51 J -33561740.51 -33561740.38 -33561740.25 0.0084 0.0006

Mercury -96600-03-16 04:03 J -33561652.46 -33561652.33 -33561652.20 0.0084 0.0006

Mercury -96600-06-12 05:15 J -33561564.41 -33561564.28 -33561564.15 0.0084 0.0019

Mercury -96600-09-08 06:13 J -33561476.35 -33561476.24 -33561476.11 0.0083 0.0032

Mercury -96600-12-05 07:39 J -33561388.29 -33561388.18 -33561388.07 0.0083 0.0043

Mercury -96599-03-03 08:51 J -33561300.23 -33561300.13 -33561300.03 0.0083 0.0056

Mercury -96599-05-30 09:49 J -33561212.15 -33561212.09 -33561212.01 0.0083 0.0068

Mercury -96599-08-26 11:01 J -33561124.06 -33561124.04 -33561124.00 0.0083 0.0080

Venus -96597-05-01 13:39 J -33560510.08 -33560509.93 -33560509.75 0.0082 0.0051

Venus -96597-12-12 23:59 J -33560284.70 -33560284.50 -33560284.29 0.0082 0.0022

Mars -96592-04-17 13:25 J -33558698.00 -33558697.94 -33558697.83 0.0079 0.0077

Earth -96590-10-25 21:35 J -33557776.79 -33557776.60 -33557776.36 0.0078 0.0040

Moon -96590-10-26 00:27 J -33557776.68 -33557776.48 -33557776.23 0.0078 0.0036 \*

Mercury -96447-01-06 23:01 J -33505837.59 -33505837.54 -33505837.43 0.0060 0.0055

Mercury -96447-04-05 00:27 J -33505749.57 -33505749.48 -33505749.34 0.0060 0.0048

Mercury -96447-07-02 02:08 J -33505661.53 -33505661.41 -33505661.25 0.0060 0.0041

Mercury -96447-09-28 03:49 J -33505573.49 -33505573.34 -33505573.17 0.0060 0.0034

Mercury -96447-12-25 05:30 J -33505485.45 -33505485.27 -33505485.09 0.0060 0.0027

Mercury -96446-03-23 06:56 J -33505397.39 -33505397.21 -33505397.02 0.0060 0.0021

Mercury -96446-06-19 08:08 J -33505309.34 -33505309.16 -33505308.95 0.0060 0.0014

Mercury -96446-09-15 09:49 J -33505221.28 -33505221.09 -33505220.89 0.0060 0.0007

Mercury -96446-12-12 11:30 J -33505133.22 -33505133.02 -33505132.82 0.0060 0.0001

Mercury -96445-03-09 12:42 J -33505045.16 -33505044.97 -33505044.76 0.0060 0.0008

Mercury -96445-06-05 14:08 J -33504957.09 -33504956.91 -33504956.70 0.0060 0.0015

Mercury -96445-09-01 15:35 J -33504869.02 -33504868.85 -33504868.65 0.0061 0.0022  
 Mercury -96445-11-28 17:30 J -33504780.95 -33504780.77 -33504780.60 0.0061 0.0028  
 Mercury -96444-02-24 18:56 J -33504692.87 -33504692.71 -33504692.55 0.0061 0.0035  
 Mercury -96444-05-23 19:54 J -33504604.78 -33504604.67 -33504604.50 0.0061 0.0043  
 Mercury -96444-08-19 21:20 J -33504516.69 -33504516.61 -33504516.47 0.0061 0.0050  
 Mercury -96444-11-15 23:01 J -33504428.58 -33504428.54 -33504428.45 0.0061 0.0057  
 Venus -96440-07-05 13:25 J -33503100.95 -33503100.94 -33503100.86 0.0062 0.0061  
 Venus -96439-02-15 18:13 J -33502875.93 -33502875.74 -33502875.52 0.0062 0.0028  
 Venus -96439-09-28 22:32 J -33502650.78 -33502650.56 -33502650.33 0.0062 0.0006  
 Venus -96438-05-12 02:08 J -33502425.56 -33502425.41 -33502425.21 0.0063 0.0041  
 Mars -96431-03-18 19:11 J -33499922.95 -33499922.70 -33499922.41 0.0065 0.0033  
 Moon -96428-04-24 02:23 J -33498790.51 -33498790.40 -33498790.23 0.0066 0.0057  
 Earth -96428-04-24 04:47 J -33498790.41 -33498790.30 -33498790.14 0.0066 0.0058 \*  
 Earth -96427-04-25 22:03 J -33498423.81 -33498423.58 -33498423.33 0.0067 0.0031  
 Moon -96427-04-25 22:18 J -33498423.81 -33498423.57 -33498423.31 0.0067 0.0029 \*  
 Mercury -96354-10-31 04:18 J -33471572.37 -33471572.32 -33471572.25 0.0085 0.0075  
 Mercury -96353-01-27 05:30 J -33471484.35 -33471484.27 -33471484.17 0.0084 0.0062  
 Mercury -96353-04-24 06:56 J -33471396.31 -33471396.21 -33471396.10 0.0084 0.0049  
 Mercury -96353-07-21 08:08 J -33471308.27 -33471308.16 -33471308.04 0.0084 0.0036  
 Mercury -96353-10-17 09:35 J -33471220.23 -33471220.10 -33471219.98 0.0084 0.0023  
 Mercury -96352-01-13 10:47 J -33471132.18 -33471132.05 -33471131.92 0.0084 0.0011  
 Mercury -96352-04-11 11:59 J -33471044.13 -33471044.00 -33471043.87 0.0084 0.0002  
 Mercury -96352-07-08 13:11 J -33470956.08 -33470955.95 -33470955.82 0.0084 0.0014  
 Mercury -96352-10-04 14:23 J -33470868.02 -33470867.90 -33470867.77 0.0083 0.0027  
 Mercury -96352-12-31 15:20 J -33470779.96 -33470779.86 -33470779.73 0.0083 0.0040  
 Mercury -96351-03-29 16:47 J -33470691.90 -33470691.80 -33470691.69 0.0083 0.0051  
 Mercury -96351-06-25 17:59 J -33470603.83 -33470603.75 -33470603.66 0.0083 0.0063  
 Mercury -96351-09-21 19:11 J -33470515.75 -33470515.70 -33470515.64 0.0083 0.0075  
 Venus -96349-04-03 17:01 J -33469955.85 -33469955.79 -33469955.70 0.0082 0.0076  
 Venus -96349-11-15 03:35 J -33469730.56 -33469730.35 -33469730.13 0.0082 0.0003



Venus -96348-06-28 13:25 J -33469505.04 -33469504.94 -33469504.81 0.0081 0.0069  
 Mars -96344-07-26 05:15 J -33468016.45 -33468016.28 -33468016.09 0.0079 0.0066  
 Moon -96342-10-27 04:03 J -33467193.46 -33467193.33 -33467193.17 0.0078 0.0062  
 Earth -96342-10-27 05:59 J -33467193.37 -33467193.25 -33467193.09 0.0078 0.0064 \*  
 Earth -96341-10-28 04:47 J -33466826.39 -33466826.30 -33466826.15 0.0077 0.0068  
 Moon -96341-10-28 05:15 J -33466826.39 -33466826.28 -33466826.12 0.0077 0.0066 \*  
 Mercury -96199-02-02 05:44 J -33415229.31 -33415229.26 -33415229.21 0.0060 0.0057  
 Mercury -96199-05-01 06:42 J -33415141.30 -33415141.22 -33415141.10 0.0060 0.0051  
 Mercury -96199-07-28 08:08 J -33415053.27 -33415053.16 -33415053.01 0.0060 0.0044  
 Mercury -96199-10-24 09:49 J -33414965.23 -33414965.09 -33414964.92 0.0060 0.0037  
 Mercury -96198-01-20 11:30 J -33414877.19 -33414877.02 -33414876.85 0.0060 0.0030  
 Mercury -96198-04-18 12:42 J -33414789.14 -33414788.97 -33414788.77 0.0060 0.0024  
 Mercury -96198-07-15 14:08 J -33414701.08 -33414700.91 -33414700.71 0.0060 0.0017  
 Mercury -96198-10-11 15:49 J -33414613.03 -33414612.84 -33414612.64 0.0060 0.0010  
 Mercury -96197-01-07 17:30 J -33414524.97 -33414524.77 -33414524.57 0.0060 0.0003  
 Mercury -96197-04-04 18:56 J -33414436.91 -33414436.71 -33414436.51 0.0060 0.0004  
 Mercury -96197-07-01 20:23 J -33414348.84 -33414348.65 -33414348.45 0.0060 0.0011  
 Mercury -96197-09-27 21:49 J -33414260.77 -33414260.59 -33414260.39 0.0061 0.0018  
 Mercury -96197-12-24 23:15 J -33414172.70 -33414172.53 -33414172.34 0.0061 0.0025  
 Mercury -96196-03-23 00:42 J -33414084.62 -33414084.47 -33414084.29 0.0061 0.0032  
 Mercury -96196-06-19 02:23 J -33413996.54 -33413996.40 -33413996.24 0.0061 0.0039  
 Mercury -96196-09-15 03:49 J -33413908.46 -33413908.34 -33413908.20 0.0061 0.0046  
 Mercury -96196-12-12 05:30 J -33413820.36 -33413820.27 -33413820.17 0.0061 0.0053  
 Mercury -96195-03-10 06:42 J -33413732.22 -33413732.22 -33413732.18 0.0061 0.0061  
 Venus -96191-01-18 23:01 J -33412321.69 -33412321.54 -33412321.33 0.0062 0.0040  
 Venus -96191-09-01 03:49 J -33412096.57 -33412096.34 -33412096.11 0.0062 0.0005  
 Venus -96190-04-14 07:25 J -33411871.37 -33411871.19 -33411870.97 0.0063 0.0029  
 Mars -96183-06-26 12:42 J -33409241.20 -33409240.97 -33409240.66 0.0065 0.0033  
 Earth -96179-04-27 05:01 J -33407840.55 -33407840.29 -33407840.02 0.0067 0.0013  
 Moon -96179-04-27 05:59 J -33407840.51 -33407840.25 -33407839.99 0.0067 0.0010 \*

Mercury	-96106-11-26 12:13 J	-33380964.02	-33380963.99	-33380963.93	0.0085	0.0079
Mercury	-96105-02-22 13:39 J	-33380876.01	-33380875.93	-33380875.85	0.0084	0.0066
Mercury	-96105-05-20 14:37 J	-33380787.98	-33380787.89	-33380787.77	0.0084	0.0054
Mercury	-96105-08-16 16:03 J	-33380699.94	-33380699.83	-33380699.71	0.0084	0.0040
Mercury	-96105-11-12 17:30 J	-33380611.89	-33380611.77	-33380611.64	0.0084	0.0027
Mercury	-96104-02-08 18:42 J	-33380523.85	-33380523.72	-33380523.59	0.0084	0.0015
Mercury	-96104-05-07 19:54 J	-33380435.80	-33380435.67	-33380435.53	0.0084	0.0003
Mercury	-96104-08-03 21:06 J	-33380347.75	-33380347.62	-33380347.48	0.0084	0.0011
Mercury	-96104-10-30 22:32 J	-33380259.69	-33380259.56	-33380259.44	0.0084	0.0023
Mercury	-96103-01-26 23:30 J	-33380171.63	-33380171.52	-33380171.39	0.0083	0.0035
Mercury	-96103-04-25 00:42 J	-33380083.57	-33380083.47	-33380083.35	0.0083	0.0047
Mercury	-96103-07-22 01:54 J	-33379995.50	-33379995.42	-33379995.32	0.0083	0.0059
Mercury	-96103-10-18 03:06 J	-33379907.43	-33379907.37	-33379907.30	0.0083	0.0072
Venus	-96101-10-18 07:11 J	-33379176.39	-33379176.20	-33379175.99	0.0082	0.0028
Venus	-96100-05-31 17:15 J	-33378950.94	-33378950.78	-33378950.59	0.0082	0.0045
Mars	-96096-11-02 21:06 J	-33377334.82	-33377334.62	-33377334.36	0.0079	0.0055
Earth	-96093-10-29 13:25 J	-33376243.12	-33376242.94	-33376242.71	0.0077	0.0045
Moon	-96093-10-29 15:06 J	-33376243.05	-33376242.87	-33376242.67	0.0077	0.0048 *

# 96TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 96th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury -95951-05-27 12:13 J -33324533.05 -33324532.99 -33324532.89 0.0060 0.0055

Mercury -95951-08-23 13:54 J -33324445.03 -33324444.92 -33324444.80 0.0060 0.0048

Mercury -95951-11-19 15:35 J -33324356.99 -33324356.85 -33324356.71 0.0060 0.0041

Mercury -95950-02-15 16:32 J -33324268.95 -33324268.81 -33324268.63 0.0060 0.0035

Mercury -95950-05-14 18:13 J -33324180.90 -33324180.74 -33324180.55 0.0060 0.0028

Mercury -95950-08-10 19:39 J -33324092.85 -33324092.68 -33324092.48 0.0060 0.0021

Mercury -95950-11-06 21:20 J -33324004.80 -33324004.61 -33324004.41 0.0060 0.0014

Mercury -95949-02-02 22:47 J -33323916.74 -33323916.55 -33323916.35 0.0060 0.0008

Mercury -95949-05-01 00:27 J -33323828.68 -33323828.48 -33323828.28 0.0060 0.0001

Mercury -95949-07-28 01:54 J -33323740.62 -33323740.42 -33323740.22 0.0060 0.0006

Mercury -95949-10-24 03:06 J -33323652.55 -33323652.37 -33323652.16 0.0060 0.0014

Mercury -95948-01-20 04:32 J -33323564.48 -33323564.31 -33323564.11 0.0061 0.0021

Mercury -95948-04-18 05:59 J -33323476.41 -33323476.25 -33323476.06 0.0061 0.0028

Mercury -95948-07-15 07:25 J -33323388.33 -33323388.19 -33323388.01 0.0061 0.0035

Mercury -95948-10-11 08:51 J -33323300.25 -33323300.13 -33323299.96 0.0061 0.0042

Mercury -95947-01-07 10:32 J -33323212.16 -33323212.06 -33323211.92 0.0061 0.0049

Mercury -95947-04-05 11:59 J -33323124.05 -33323124.00 -33323123.90 0.0061 0.0056

Venus -95944-12-22 03:20 J -33321767.45 -33321767.36 -33321767.22 0.0062 0.0053

Venus -95943-08-04 07:25 J -33321542.38 -33321542.19 -33321541.95 0.0062 0.0021

Venus -95942-03-17 11:59 J -33321317.22 -33321317.00 -33321316.77 0.0062 0.0014

Venus -95942-10-28 15:49 J -33321091.97 -33321091.84 -33321091.68 0.0063 0.0048

Mars -95935-10-04 03:06 J -33318559.59 -33318559.37 -33318559.09 0.0065 0.0040

Moon -95931-04-28 07:25 J -33317257.46 -33317257.19 -33317256.91 0.0066 0.0011

Earth -95931-04-28 10:03 J -33317257.35 -33317257.08 -33317256.81 0.0066 0.0011 \*

Mercury -95857-03-19 20:51 J -33290267.69 -33290267.63 -33290267.57 0.0085 0.0076

Mercury -95857-06-15 21:49 J -33290179.66 -33290179.59 -33290179.49 0.0084 0.0063

Mercury -95857-09-11 23:15 J -33290091.63 -33290091.53 -33290091.42 0.0084 0.0050

Mercury -95857-12-09 00:42 J -33290003.59 -33290003.47 -33290003.36 0.0084 0.0037

Mercury -95856-03-07 01:39 J -33289915.55 -33289915.43 -33289915.29 0.0084 0.0025

Mercury -95856-06-03 03:06 J -33289827.50 -33289827.37 -33289827.24 0.0084 0.0012

Mercury -95856-08-30 04:18 J -33289739.45 -33289739.32 -33289739.19 0.0084 0.0002

Mercury -95856-11-26 05:30 J -33289651.40 -33289651.27 -33289651.14 0.0084 0.0013

Mercury -95855-02-22 06:42 J -33289563.34 -33289563.22 -33289563.09 0.0083 0.0025

Mercury -95855-05-21 07:54 J -33289475.28 -33289475.17 -33289475.05 0.0083 0.0037

Mercury -95855-08-17 09:06 J -33289387.22 -33289387.12 -33289387.01 0.0083 0.0050

Mercury -95855-11-13 10:32 J -33289299.15 -33289299.06 -33289298.98 0.0083 0.0062

Mercury -95854-02-09 11:15 J -33289211.07 -33289211.03 -33289210.96 0.0083 0.0074

Venus -95853-09-20 07:39 J -33288622.30 -33288622.18 -33288622.04 0.0082 0.0065

Venus -95852-05-03 17:59 J -33288396.96 -33288396.75 -33288396.53 0.0082 0.0008

Venus -95852-12-15 03:49 J -33288171.38 -33288171.34 -33288171.27 0.0081 0.0079

Mars -95847-02-10 02:08 J -33286653.56 -33286653.41 -33286653.24 0.0079 0.0068

Moon -95845-10-30 15:20 J -33285660.11 -33285659.86 -33285659.60 0.0078 0.0009

Earth -95845-10-30 17:44 J -33285660.00 -33285659.76 -33285659.50 0.0078 0.0007 \*

Mercury -95703-09-18 18:42 J -33233836.78 -33233836.72 -33233836.61 0.0060 0.0054

Mercury -95703-12-15 20:23 J -33233748.75 -33233748.65 -33233748.51 0.0060 0.0047

Mercury -95702-03-13 21:49 J -33233660.72 -33233660.59 -33233660.43 0.0060 0.0040

Mercury -95702-06-09 23:30 J -33233572.67 -33233572.52 -33233572.35 0.0060 0.0033

Mercury -95702-09-06 01:11 J -33233484.62 -33233484.45 -33233484.27 0.0060 0.0027

Mercury -95702-12-03 02:23 J -33233396.57 -33233396.40 -33233396.20 0.0060 0.0020

Mercury -95701-02-29 03:49 J -33233308.52 -33233308.34 -33233308.13 0.0060 0.0014

Mercury -95701-05-27 05:30 J -33233220.46 -33233220.27 -33233220.07 0.0060 0.0006

Mercury -95701-08-23 07:11 J -33233132.40 -33233132.20 -33233132.00 0.0060 0.0001

Mercury -95701-11-19 08:37 J -33233044.34 -33233044.14 -33233043.94 0.0060 0.0008

Mercury -95700-02-15 10:03 J -33232956.27 -33232956.08 -33232955.89 0.0061 0.0015

Mercury -95700-05-14 11:15 J -33232868.20 -33232868.03 -33232867.83 0.0061 0.0022

Mercury -95700-08-10 12:42 J -33232780.13 -33232779.97 -33232779.78 0.0061 0.0029

Mercury -95700-11-06 14:08 J -33232692.05 -33232691.91 -33232691.73 0.0061 0.0036

Mercury -95699-02-02 15:49 J -33232603.96 -33232603.84 -33232603.69 0.0061 0.0043

Mercury -95699-05-01 17:15 J -33232515.87 -33232515.78 -33232515.65 0.0061 0.0050

Mercury -95699-07-28 18:42 J -33232427.76 -33232427.72 -33232427.63 0.0061 0.0057

Venus -95695-07-07 11:15 J -33230988.20 -33230988.03 -33230987.84 0.0062 0.0036  
 Venus -95694-02-17 15:35 J -33230763.07 -33230762.85 -33230762.62 0.0062 0.0004  
 Venus -95694-09-30 19:25 J -33230537.87 -33230537.69 -33230537.47 0.0063 0.0031  
 Mars -95686-01-11 14:51 J -33227878.05 -33227877.88 -33227877.65 0.0065 0.0051  
 Earth -95683-04-29 13:25 J -33226674.15 -33226673.94 -33226673.70 0.0066 0.0037  
 Moon -95683-04-29 17:15 J -33226674.00 -33226673.78 -33226673.54 0.0066 0.0033 \*  
 Moon -95682-05-01 02:51 J -33226307.53 -33226307.38 -33226307.18 0.0067 0.0050  
 Earth -95682-05-01 06:56 J -33226307.37 -33226307.21 -33226307.05 0.0067 0.0053 \*  
 Mercury -95609-04-15 04:03 J -33199659.33 -33199659.33 -33199659.33 0.0085 0.0085  
 Mercury -95609-07-12 05:15 J -33199571.34 -33199571.28 -33199571.21 0.0084 0.0072  
 Mercury -95609-10-08 06:42 J -33199483.31 -33199483.22 -33199483.13 0.0084 0.0059  
 Mercury -95608-01-04 07:39 J -33199395.28 -33199395.18 -33199395.06 0.0084 0.0047  
 Mercury -95608-04-02 09:06 J -33199307.24 -33199307.12 -33199307.00 0.0084 0.0033  
 Mercury -95608-06-29 10:18 J -33199219.19 -33199219.07 -33199218.94 0.0084 0.0021  
 Mercury -95608-09-25 11:30 J -33199131.14 -33199131.02 -33199130.88 0.0084 0.0009  
 Mercury -95608-12-22 12:56 J -33199043.09 -33199042.96 -33199042.83 0.0084 0.0004  
 Mercury -95607-03-20 14:08 J -33198955.04 -33198954.91 -33198954.78 0.0084 0.0017  
 Mercury -95607-06-16 15:06 J -33198866.98 -33198866.87 -33198866.74 0.0083 0.0030  
 Mercury -95607-09-12 16:18 J -33198778.92 -33198778.82 -33198778.69 0.0083 0.0042  
 Mercury -95607-12-09 17:44 J -33198690.86 -33198690.76 -33198690.66 0.0083 0.0053  
 Mercury -95606-03-07 18:56 J -33198602.79 -33198602.71 -33198602.63 0.0083 0.0065  
 Mercury -95606-06-03 20:08 J -33198514.70 -33198514.66 -33198514.61 0.0083 0.0077  
 Venus -95604-04-05 19:11 J -33197842.89 -33197842.70 -33197842.49 0.0082 0.0027  
 Venus -95604-11-17 05:15 J -33197617.44 -33197617.28 -33197617.09 0.0082 0.0045  
 Mars -95599-05-20 09:49 J -33195972.15 -33195972.09 -33195971.96 0.0079 0.0075  
 Earth -95597-10-31 22:47 J -33195076.77 -33195076.55 -33195076.30 0.0078 0.0028  
 Moon -95597-11-01 01:54 J -33195076.63 -33195076.42 -33195076.17 0.0078 0.0030 \*  
 Mercury -95454-01-11 00:42 J -33143140.53 -33143140.47 -33143140.36 0.0060 0.0054  
 Mercury -95454-04-09 02:23 J -33143052.50 -33143052.40 -33143052.26 0.0060 0.0047  
 Mercury -95454-07-06 04:03 J -33142964.47 -33142964.33 -33142964.18 0.0060 0.0040

Mercury -95454-10-02 05:15 J -33142876.42 -33142876.28 -33142876.10 0.0060 0.0034

Mercury -95454-12-29 06:56 J -33142788.37 -33142788.21 -33142788.02 0.0060 0.0027

Mercury -95453-03-26 08:23 J -33142700.32 -33142700.15 -33142699.95 0.0060 0.0021

Mercury -95453-06-22 10:03 J -33142612.27 -33142612.08 -33142611.88 0.0060 0.0013

Mercury -95453-09-18 11:44 J -33142524.21 -33142524.01 -33142523.82 0.0060 0.0007

Mercury -95453-12-15 13:11 J -33142436.15 -33142435.95 -33142435.75 0.0060 0.0001

Mercury -95452-03-13 14:23 J -33142348.09 -33142347.90 -33142347.69 0.0060 0.0008

Mercury -95452-06-09 15:49 J -33142260.02 -33142259.84 -33142259.63 0.0060 0.0015

Mercury -95452-09-05 17:15 J -33142171.95 -33142171.78 -33142171.58 0.0061 0.0022

Mercury -95452-12-02 19:11 J -33142083.88 -33142083.70 -33142083.53 0.0061 0.0028

Mercury -95451-02-28 20:37 J -33141995.80 -33141995.64 -33141995.48 0.0061 0.0035

Mercury -95451-05-27 22:03 J -33141907.72 -33141907.58 -33141907.43 0.0061 0.0042

Mercury -95451-08-23 23:30 J -33141819.63 -33141819.52 -33141819.40 0.0061 0.0049

Mercury -95451-11-20 01:11 J -33141731.52 -33141731.45 -33141731.38 0.0061 0.0056

Venus -95447-06-09 13:25 J -33140434.02 -33140433.94 -33140433.83 0.0062 0.0056

Venus -95446-01-20 17:44 J -33140208.96 -33140208.76 -33140208.54 0.0062 0.0023

Venus -95446-09-02 21:49 J -33139983.80 -33139983.59 -33139983.35 0.0062 0.0010

Venus -95445-04-15 01:39 J -33139758.57 -33139758.43 -33139758.24 0.0063 0.0044

Earth -95434-05-02 07:54 J -33135724.42 -33135724.17 -33135723.90 0.0067 0.0021

Moon -95434-05-02 11:15 J -33135724.28 -33135724.03 -33135723.76 0.0067 0.0020 \*

Mercury -95361-11-03 12:56 J -33108875.02 -33108874.96 -33108874.89 0.0084 0.0074

Mercury -95360-01-30 13:54 J -33108786.99 -33108786.92 -33108786.81 0.0084 0.0062

Mercury -95360-04-28 15:20 J -33108698.96 -33108698.86 -33108698.74 0.0084 0.0049

Mercury -95360-07-25 16:47 J -33108610.92 -33108610.80 -33108610.68 0.0084 0.0036

Mercury -95360-10-21 17:59 J -33108522.87 -33108522.75 -33108522.62 0.0084 0.0023

Mercury -95359-01-17 19:11 J -33108434.83 -33108434.70 -33108434.56 0.0084 0.0011

Mercury -95359-04-15 20:37 J -33108346.78 -33108346.64 -33108346.51 0.0084 0.0003

Mercury -95359-07-12 21:49 J -33108258.72 -33108258.59 -33108258.46 0.0084 0.0014

Mercury -95359-10-08 23:01 J -33108170.67 -33108170.54 -33108170.42 0.0083 0.0027

Mercury -95358-01-04 23:59 J -33108082.61 -33108082.50 -33108082.37 0.0083 0.0039

Mercury -95358-04-03 01:11 J -33107994.54 -33107994.45 -33107994.34 0.0083 0.0051

Mercury -95358-06-30 02:23 J -33107906.47 -33107906.40 -33107906.31 0.0083 0.0063

Mercury -95358-09-26 03:35 J -33107818.39 -33107818.35 -33107818.29 0.0083 0.0075

Venus -95356-03-08 16:47 J -33107288.86 -33107288.80 -33107288.70 0.0082 0.0076

Venus -95356-10-20 03:35 J -33107063.56 -33107063.35 -33107063.13 0.0082 0.0004

Venus -95355-06-02 13:25 J -33106838.04 -33106837.94 -33106837.81 0.0081 0.0068

Earth -95349-11-01 22:47 J -33104493.55 -33104493.55 -33104493.51 0.0078 0.0078

Earth -95348-11-03 21:49 J -33104126.75 -33104126.59 -33104126.40 0.0077 0.0055

Moon -95348-11-03 23:59 J -33104126.64 -33104126.50 -33104126.30 0.0077 0.0059 \*

Mercury -95206-05-05 06:42 J -33052444.28 -33052444.22 -33052444.13 0.0060 0.0055

Mercury -95206-08-01 08:23 J -33052356.26 -33052356.15 -33052356.03 0.0060 0.0048

Mercury -95206-10-28 09:35 J -33052268.22 -33052268.10 -33052267.94 0.0060 0.0042

Mercury -95205-01-24 11:01 J -33052180.18 -33052180.04 -33052179.86 0.0060 0.0036

Mercury -95205-04-21 12:42 J -33052092.13 -33052091.97 -33052091.78 0.0060 0.0028

Mercury -95205-07-18 14:23 J -33052004.08 -33052003.90 -33052003.71 0.0060 0.0022

Mercury -95205-10-14 15:35 J -33051916.03 -33051915.85 -33051915.64 0.0060 0.0015

Mercury -95204-01-10 17:15 J -33051827.97 -33051827.78 -33051827.58 0.0060 0.0008

Mercury -95204-04-08 18:56 J -33051739.91 -33051739.71 -33051739.51 0.0060 0.0001

Mercury -95204-07-05 20:23 J -33051651.84 -33051651.65 -33051651.45 0.0060 0.0006

Mercury -95204-10-01 21:49 J -33051563.78 -33051563.59 -33051563.39 0.0060 0.0013

Mercury -95204-12-28 23:15 J -33051475.71 -33051475.53 -33051475.34 0.0061 0.0020

Mercury -95203-03-27 00:42 J -33051387.64 -33051387.47 -33051387.28 0.0061 0.0027

Mercury -95203-06-23 02:08 J -33051299.56 -33051299.41 -33051299.23 0.0061 0.0034

Mercury -95203-09-19 03:35 J -33051211.48 -33051211.35 -33051211.19 0.0061 0.0041

Mercury -95203-12-16 05:01 J -33051123.39 -33051123.29 -33051123.15 0.0061 0.0048

Mercury -95202-03-14 06:27 J -33051035.29 -33051035.23 -33051035.12 0.0061 0.0055

Venus -95199-12-23 19:25 J -33049654.83 -33049654.69 -33049654.52 0.0062 0.0045

Venus -95198-08-05 23:44 J -33049429.73 -33049429.51 -33049429.28 0.0062 0.0012

Venus -95197-03-18 03:49 J -33049204.54 -33049204.34 -33049204.11 0.0062 0.0021

Venus -95197-10-29 07:54 J -33048979.26 -33048979.17 -33048979.05 0.0063 0.0055

Moon	-95186-05-03 07:11 J	-33045141.46	-33045141.20	-33045140.94	0.0067	0.0010
Earth	-95186-05-03 08:51 J	-33045141.39	-33045141.13	-33045140.87	0.0067	0.0013 *
Mercury	-95112-02-25 20:37 J	-33018178.69	-33018178.64	-33018178.57	0.0084	0.0075
Mercury	-95112-05-24 22:03 J	-33018090.67	-33018090.58	-33018090.49	0.0084	0.0061
Mercury	-95112-08-20 23:01 J	-33018002.63	-33018002.54	-33018002.42	0.0084	0.0050
Mercury	-95112-11-17 00:27 J	-33017914.59	-33017914.48	-33017914.35	0.0084	0.0036
Mercury	-95111-02-13 01:39 J	-33017826.55	-33017826.43	-33017826.29	0.0084	0.0024
Mercury	-95111-05-12 03:06 J	-33017738.50	-33017738.37	-33017738.24	0.0084	0.0011
Mercury	-95111-08-08 04:18 J	-33017650.45	-33017650.32	-33017650.19	0.0084	0.0002
Mercury	-95111-11-04 05:30 J	-33017562.40	-33017562.27	-33017562.14	0.0084	0.0014
Mercury	-95110-01-31 06:42 J	-33017474.34	-33017474.22	-33017474.09	0.0083	0.0026
Mercury	-95110-04-29 07:54 J	-33017386.28	-33017386.17	-33017386.05	0.0083	0.0038
Mercury	-95110-07-26 09:06 J	-33017298.22	-33017298.12	-33017298.01	0.0083	0.0050
Mercury	-95110-10-22 10:18 J	-33017210.15	-33017210.07	-33017209.98	0.0083	0.0062
Mercury	-95109-01-18 11:30 J	-33017122.07	-33017122.02	-33017121.96	0.0083	0.0074
Venus	-95108-09-22 01:39 J	-33016509.58	-33016509.43	-33016509.24	0.0082	0.0049
Venus	-95107-05-05 12:13 J	-33016284.19	-33016283.99	-33016283.78	0.0082	0.0023
Moon	-95100-11-04 21:49 J	-33013543.83	-33013543.59	-33013543.34	0.0077	0.0009
Earth	-95100-11-04 23:30 J	-33013543.76	-33013543.52	-33013543.26	0.0077	0.0010 *

# 95TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 95th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury	-94958-08-27 11:15 J	-32961748.03	-32961748.03	-32961747.96	0.0060	0.0059
Mercury	-94958-11-23 13:11 J	-32961660.03	-32961659.95	-32961659.84	0.0060	0.0052
Mercury	-94957-02-19 14:51 J	-32961572.00	-32961571.88	-32961571.75	0.0060	0.0045
Mercury	-94957-05-17 15:49 J	-32961483.97	-32961483.84	-32961483.67	0.0060	0.0039
Mercury	-94957-08-13 17:30 J	-32961395.92	-32961395.77	-32961395.59	0.0060	0.0032
Mercury	-94957-11-09 19:11 J	-32961307.87	-32961307.70	-32961307.51	0.0060	0.0025
Mercury	-94956-02-05 20:51 J	-32961219.82	-32961219.63	-32961219.44	0.0060	0.0019
Mercury	-94956-05-04 22:03 J	-32961131.76	-32961131.58	-32961131.38	0.0060	0.0012
Mercury	-94956-07-31 23:44 J	-32961043.70	-32961043.51	-32961043.31	0.0060	0.0005
Mercury	-94956-10-28 01:11 J	-32960955.64	-32960955.45	-32960955.25	0.0060	0.0002
Mercury	-94955-01-24 02:51 J	-32960867.58	-32960867.38	-32960867.19	0.0060	0.0009
Mercury	-94955-04-22 04:03 J	-32960779.51	-32960779.33	-32960779.13	0.0061	0.0016
Mercury	-94955-07-19 05:30 J	-32960691.44	-32960691.27	-32960691.07	0.0061	0.0023
Mercury	-94955-10-15 06:56 J	-32960603.37	-32960603.21	-32960603.02	0.0061	0.0030
Mercury	-94954-01-11 08:23 J	-32960515.29	-32960515.15	-32960514.97	0.0061	0.0037
Mercury	-94954-04-09 09:49 J	-32960427.20	-32960427.09	-32960426.93	0.0061	0.0044
Mercury	-94954-07-06 11:15 J	-32960339.11	-32960339.03	-32960338.90	0.0061	0.0051
Mercury	-94954-10-02 12:42 J	-32960251.00	-32960250.97	-32960250.88	0.0061	0.0058
Venus	-94950-07-08 23:15 J	-32958875.68	-32958875.53	-32958875.33	0.0062	0.0039
Venus	-94949-02-19 03:49 J	-32958650.56	-32958650.34	-32958650.10	0.0062	0.0007
Venus	-94949-10-01 07:39 J	-32958425.36	-32958425.18	-32958424.95	0.0062	0.0028
Venus	-94948-05-14 11:59 J	-32958200.04	-32958200.00	-32958199.93	0.0063	0.0061
Moon	-94938-05-04 04:18 J	-32954558.43	-32954558.32	-32954558.13	0.0066	0.0056
Earth	-94938-05-04 05:44 J	-32954558.40	-32954558.26	-32954558.11	0.0066	0.0056 *
Earth	-94937-05-04 22:32 J	-32954191.78	-32954191.56	-32954191.32	0.0067	0.0034
Moon	-94937-05-04 23:59 J	-32954191.70	-32954191.50	-32954191.25	0.0067	0.0034 *
Mercury	-94864-06-20 03:20 J	-32927482.38	-32927482.36	-32927482.33	0.0085	0.0083
Mercury	-94864-09-16 04:47 J	-32927394.37	-32927394.30	-32927394.23	0.0084	0.0070
Mercury	-94864-12-13 05:44 J	-32927306.34	-32927306.26	-32927306.15	0.0084	0.0058

Mercury -94863-03-11 07:11 J -32927218.31 -32927218.20 -32927218.08 0.0084 0.0044

Mercury -94863-06-07 08:23 J -32927130.26 -32927130.15 -32927130.02 0.0084 0.0032

Mercury -94863-09-03 09:49 J -32927042.22 -32927042.09 -32927041.96 0.0084 0.0019

Mercury -94863-11-30 11:01 J -32926954.17 -32926954.04 -32926953.91 0.0084 0.0007

Mercury -94862-02-26 12:13 J -32926866.12 -32926865.99 -32926865.86 0.0084 0.0006

Mercury -94862-05-25 13:25 J -32926778.07 -32926777.94 -32926777.81 0.0084 0.0018

Mercury -94862-08-21 14:37 J -32926690.01 -32926689.89 -32926689.76 0.0083 0.0030

Mercury -94862-11-17 15:49 J -32926601.95 -32926601.84 -32926601.72 0.0083 0.0042

Mercury -94861-02-13 17:01 J -32926513.88 -32926513.79 -32926513.69 0.0083 0.0054

Mercury -94861-05-11 18:13 J -32926425.81 -32926425.74 -32926425.66 0.0083 0.0066

Mercury -94861-08-07 19:25 J -32926337.73 -32926337.69 -32926337.65 0.0083 0.0078

Venus -94859-04-07 06:42 J -32925730.39 -32925730.22 -32925730.02 0.0082 0.0039

Venus -94859-11-18 17:01 J -32925504.97 -32925504.79 -32925504.58 0.0082 0.0033

Moon -94852-11-05 18:27 J -32922960.88 -32922960.73 -32922960.55 0.0078 0.0059

Earth -94852-11-05 18:56 J -32922960.88 -32922960.71 -32922960.53 0.0078 0.0055 \*

Earth -94851-11-07 17:15 J -32922593.78 -32922593.78 -32922593.74 0.0077 0.0077

Mercury -94709-03-16 17:30 J -32870963.81 -32870963.77 -32870963.69 0.0060 0.0057

Mercury -94709-06-12 19:11 J -32870875.79 -32870875.70 -32870875.58 0.0060 0.0050

Mercury -94709-09-08 20:23 J -32870787.76 -32870787.65 -32870787.49 0.0060 0.0044

Mercury -94709-12-05 22:03 J -32870699.72 -32870699.58 -32870699.41 0.0060 0.0037

Mercury -94708-03-03 23:30 J -32870611.68 -32870611.52 -32870611.34 0.0060 0.0031

Mercury -94708-05-31 01:11 J -32870523.63 -32870523.45 -32870523.26 0.0060 0.0024

Mercury -94708-08-27 02:23 J -32870435.57 -32870435.40 -32870435.19 0.0060 0.0018

Mercury -94708-11-23 04:03 J -32870347.51 -32870347.33 -32870347.13 0.0060 0.0010

Mercury -94707-02-19 05:44 J -32870259.45 -32870259.26 -32870259.06 0.0060 0.0003

Mercury -94707-05-18 07:11 J -32870171.39 -32870171.20 -32870171.00 0.0060 0.0004

Mercury -94707-08-14 08:37 J -32870083.33 -32870083.14 -32870082.94 0.0060 0.0011

Mercury -94707-11-10 10:03 J -32869995.26 -32869995.08 -32869994.88 0.0061 0.0018

Mercury -94706-02-06 11:30 J -32869907.19 -32869907.02 -32869906.83 0.0061 0.0025

Mercury -94706-05-05 12:56 J -32869819.11 -32869818.96 -32869818.77 0.0061 0.0032

Mercury -94706-08-01 14:23 J -32869731.03 -32869730.90 -32869730.73 0.0061 0.0039

Mercury -94706-10-28 15:49 J -32869642.95 -32869642.84 -32869642.69 0.0061 0.0046

Mercury -94705-01-24 17:59 J -32869554.85 -32869554.75 -32869554.65 0.0061 0.0052

Mercury -94705-04-21 18:42 J -32869466.73 -32869466.72 -32869466.65 0.0061 0.0060

Venus -94701-01-22 03:06 J -32868096.54 -32868096.37 -32868096.16 0.0062 0.0035

Venus -94701-09-03 07:39 J -32867871.41 -32867871.18 -32867870.95 0.0062 0.0002

Venus -94700-04-16 11:44 J -32867646.21 -32867646.01 -32867645.81 0.0062 0.0031

Mars -94691-01-03 16:18 J -32864461.82 -32864461.82 -32864461.78 0.0066 0.0066

Moon -94689-05-05 15:06 J -32863609.13 -32863608.87 -32863608.59 0.0067 0.0008

Earth -94689-05-05 18:27 J -32863608.99 -32863608.73 -32863608.46 0.0067 0.0012 \*

Mercury -94615-01-08 11:15 J -32836698.07 -32836698.03 -32836697.97 0.0084 0.0078

Mercury -94615-04-06 12:42 J -32836610.05 -32836609.97 -32836609.88 0.0084 0.0065

Mercury -94615-07-03 13:54 J -32836522.02 -32836521.92 -32836521.81 0.0084 0.0052

Mercury -94615-09-29 15:06 J -32836433.98 -32836433.87 -32836433.75 0.0084 0.0040

Mercury -94615-12-26 16:18 J -32836345.94 -32836345.82 -32836345.69 0.0084 0.0027

Mercury -94614-03-24 17:44 J -32836257.89 -32836257.76 -32836257.63 0.0084 0.0014

Mercury -94614-06-20 18:56 J -32836169.84 -32836169.71 -32836169.58 0.0084 0.0002

Mercury -94614-09-16 20:08 J -32836081.79 -32836081.66 -32836081.53 0.0084 0.0011

Mercury -94614-12-13 21:20 J -32835993.73 -32835993.61 -32835993.48 0.0083 0.0023

Mercury -94613-03-10 22:32 J -32835905.68 -32835905.56 -32835905.44 0.0083 0.0035

Mercury -94613-06-06 23:30 J -32835817.61 -32835817.52 -32835817.40 0.0083 0.0048

Mercury -94613-09-03 00:42 J -32835729.55 -32835729.47 -32835729.36 0.0083 0.0059

Mercury -94613-11-30 01:54 J -32835641.47 -32835641.42 -32835641.34 0.0083 0.0071

Mercury -94612-02-26 03:20 J -32835553.36 -32835553.36 -32835553.35 0.0083 0.0083

Venus -94611-10-21 11:59 J -32834951.20 -32834951.00 -32834950.80 0.0082 0.0028

Venus -94610-06-03 22:03 J -32834725.76 -32834725.58 -32834725.39 0.0082 0.0043

Moon -94603-11-08 10:47 J -32832011.30 -32832011.05 -32832010.80 0.0077 0.0014

Earth -94603-11-08 13:39 J -32832011.17 -32832010.93 -32832010.68 0.0077 0.0015 \*

Mercury -94461-10-04 22:32 J -32780179.59 -32780179.56 -32780179.50 0.0060 0.0058

Mercury -94461-12-31 23:44 J -32780091.58 -32780091.51 -32780091.39 0.0060 0.0052

Mercury -94460-03-30 01:25 J -32780003.55 -32780003.44 -32780003.29 0.0060 0.0045

Mercury -94460-06-26 03:06 J -32779915.51 -32779915.37 -32779915.21 0.0060 0.0038

Mercury -94460-09-22 04:18 J -32779827.47 -32779827.32 -32779827.13 0.0060 0.0032

Mercury -94460-12-19 05:59 J -32779739.42 -32779739.25 -32779739.06 0.0060 0.0025

Mercury -94459-03-17 07:25 J -32779651.37 -32779651.19 -32779650.99 0.0060 0.0019

Mercury -94459-06-13 09:06 J -32779563.31 -32779563.12 -32779562.92 0.0060 0.0012

Mercury -94459-09-09 10:32 J -32779475.25 -32779475.06 -32779474.86 0.0060 0.0005

Mercury -94459-12-06 12:13 J -32779387.19 -32779386.99 -32779386.79 0.0060 0.0002

Mercury -94458-03-04 13:39 J -32779299.12 -32779298.93 -32779298.73 0.0060 0.0009

Mercury -94458-05-31 15:06 J -32779211.06 -32779210.87 -32779210.68 0.0060 0.0016

Mercury -94458-08-27 16:32 J -32779122.99 -32779122.81 -32779122.62 0.0061 0.0023

Mercury -94458-11-23 17:59 J -32779034.91 -32779034.75 -32779034.57 0.0061 0.0030

Mercury -94457-02-19 19:11 J -32778946.83 -32778946.70 -32778946.52 0.0061 0.0037

Mercury -94457-05-17 20:37 J -32778858.75 -32778858.64 -32778858.48 0.0061 0.0044

Mercury -94457-08-13 22:18 J -32778770.66 -32778770.57 -32778770.44 0.0061 0.0051

Mercury -94457-11-09 23:44 J -32778682.55 -32778682.51 -32778682.43 0.0061 0.0058

Venus -94453-08-06 04:03 J -32777317.49 -32777317.33 -32777317.13 0.0062 0.0038

Venus -94452-03-19 08:37 J -32777092.37 -32777092.14 -32777091.91 0.0062 0.0005

Venus -94452-10-30 12:42 J -32776867.17 -32776866.97 -32776866.77 0.0062 0.0028

Venus -94451-06-12 16:03 J -32776641.84 -32776641.83 -32776641.75 0.0063 0.0062

Mars -94443-04-12 06:42 J -32773781.52 -32773781.22 -32773780.89 0.0065 0.0010

Moon -94440-05-07 23:30 J -32772659.75 -32772659.52 -32772659.25 0.0067 0.0021

Earth -94440-05-08 02:37 J -32772659.64 -32772659.39 -32772659.13 0.0067 0.0021 \*

Mercury -94367-07-29 17:44 J -32745913.78 -32745913.76 -32745913.72 0.0085 0.0082

Mercury -94367-10-25 19:11 J -32745825.77 -32745825.70 -32745825.62 0.0084 0.0069

Mercury -94366-01-21 20:23 J -32745737.74 -32745737.65 -32745737.55 0.0084 0.0056

Mercury -94366-04-19 21:49 J -32745649.70 -32745649.59 -32745649.48 0.0084 0.0044

Mercury -94366-07-16 23:01 J -32745561.66 -32745561.54 -32745561.42 0.0084 0.0031

Mercury -94366-10-13 00:13 J -32745473.62 -32745473.49 -32745473.36 0.0084 0.0019

Mercury -94365-01-09 01:25 J -32745385.57 -32745385.44 -32745385.30 0.0084 0.0007

Mercury -94365-04-06 02:37 J -32745297.52 -32745297.39 -32745297.25 0.0084 0.0007

Mercury -94365-07-03 03:49 J -32745209.46 -32745209.34 -32745209.21 0.0084 0.0019

Mercury -94365-09-29 05:01 J -32745121.41 -32745121.29 -32745121.16 0.0083 0.0031

Mercury -94365-12-26 06:27 J -32745033.35 -32745033.23 -32745033.12 0.0083 0.0043

Mercury -94364-03-24 07:11 J -32744945.28 -32744945.20 -32744945.08 0.0083 0.0056

Mercury -94364-06-20 08:23 J -32744857.21 -32744857.15 -32744857.06 0.0083 0.0067

Mercury -94364-09-16 09:35 J -32744769.12 -32744769.10 -32744769.04 0.0083 0.0079

Venus -94362-05-06 11:44 J -32744172.18 -32744172.01 -32744171.80 0.0082 0.0038

Venus -94362-12-17 22:18 J -32743946.76 -32743946.57 -32743946.37 0.0082 0.0033

Mars -94356-08-19 03:06 J -32741875.52 -32741875.37 -32741875.19 0.0078 0.0067

Earth -94355-11-09 02:08 J -32741428.50 -32741428.41 -32741428.30 0.0078 0.0071

Moon -94355-11-09 05:59 J -32741428.31 -32741428.25 -32741428.19 0.0078 0.0075 \*

Moon -94354-11-10 21:49 J -32741061.69 -32741061.59 -32741061.44 0.0077 0.0066

Earth -94354-11-11 00:42 J -32741061.59 -32741061.47 -32741061.29 0.0077 0.0062 \*

Mercury -94212-07-22 04:18 J -32689307.38 -32689307.32 -32689307.21 0.0060 0.0054

Mercury -94212-10-18 06:13 J -32689219.35 -32689219.24 -32689219.12 0.0060 0.0047

Mercury -94211-01-14 07:11 J -32689131.32 -32689131.20 -32689131.03 0.0060 0.0041

Mercury -94211-04-12 08:51 J -32689043.27 -32689043.13 -32689042.95 0.0060 0.0034

Mercury -94211-07-09 10:32 J -32688955.23 -32688955.06 -32688954.88 0.0060 0.0027

Mercury -94211-10-05 11:44 J -32688867.18 -32688867.01 -32688866.81 0.0060 0.0021

Mercury -94210-01-01 13:25 J -32688779.12 -32688778.94 -32688778.74 0.0060 0.0014

Mercury -94210-03-30 15:06 J -32688691.06 -32688690.87 -32688690.67 0.0060 0.0007

Mercury -94210-06-26 16:32 J -32688603.00 -32688602.81 -32688602.61 0.0060 0.0002

Mercury -94210-09-22 17:59 J -32688514.94 -32688514.75 -32688514.55 0.0060 0.0007

Mercury -94210-12-19 19:25 J -32688426.87 -32688426.69 -32688426.49 0.0060 0.0014

Mercury -94209-03-16 20:51 J -32688338.80 -32688338.63 -32688338.43 0.0061 0.0021

Mercury -94209-06-12 22:47 J -32688250.73 -32688250.55 -32688250.38 0.0061 0.0027

Mercury -94209-09-08 23:59 J -32688162.65 -32688162.50 -32688162.33 0.0061 0.0034

Mercury -94209-12-06 01:25 J -32688074.57 -32688074.44 -32688074.28 0.0061 0.0041

Mercury -94208-03-04 02:51 J -32687986.48 -32687986.38 -32687986.24 0.0061 0.0048

Mercury -94208-05-31 04:18 J -32687898.38 -32687898.32 -32687898.22 0.0061 0.0055

Venus -94204-02-19 05:01 J -32686538.44 -32686538.29 -32686538.11 0.0062 0.0042

Venus -94204-10-02 09:06 J -32686313.34 -32686313.12 -32686312.89 0.0062 0.0010

Venus -94203-05-15 12:56 J -32686088.15 -32686087.96 -32686087.73 0.0062 0.0024

Venus -94203-12-26 16:47 J -32685862.87 -32685862.80 -32685862.67 0.0063 0.0057

Mars -94195-07-19 19:39 J -32683100.88 -32683100.68 -32683100.45 0.0065 0.0048

Earth -94192-05-08 16:32 J -32682077.00 -32682076.81 -32682076.57 0.0066 0.0039

Moon -94192-05-08 18:13 J -32682076.95 -32682076.74 -32682076.48 0.0066 0.0036 \*

Earth -94191-05-10 09:20 J -32681710.25 -32681710.11 -32681709.92 0.0067 0.0053

Moon -94191-05-10 09:49 J -32681710.23 -32681710.09 -32681709.88 0.0067 0.0050 \*

Mercury -94118-05-16 01:25 J -32655041.49 -32655041.44 -32655041.36 0.0084 0.0074

Mercury -94118-08-12 02:51 J -32654953.46 -32654953.38 -32654953.28 0.0084 0.0060

Mercury -94118-11-08 04:18 J -32654865.43 -32654865.32 -32654865.21 0.0084 0.0048

Mercury -94117-02-04 05:30 J -32654777.39 -32654777.27 -32654777.15 0.0084 0.0035

Mercury -94117-05-02 06:42 J -32654689.34 -32654689.22 -32654689.09 0.0084 0.0023

Mercury -94117-07-29 07:54 J -32654601.30 -32654601.17 -32654601.03 0.0084 0.0011

Mercury -94117-10-25 09:20 J -32654513.25 -32654513.11 -32654512.98 0.0084 0.0003

Mercury -94116-01-21 10:18 J -32654425.19 -32654425.07 -32654424.93 0.0084 0.0015

Mercury -94116-04-19 11:30 J -32654337.14 -32654337.02 -32654336.89 0.0083 0.0027

Mercury -94116-07-16 12:56 J -32654249.08 -32654248.96 -32654248.85 0.0083 0.0039

Mercury -94116-10-12 14:08 J -32654161.02 -32654160.91 -32654160.81 0.0083 0.0051

Mercury -94115-01-08 15:20 J -32654072.95 -32654072.86 -32654072.78 0.0083 0.0063

Mercury -94115-04-06 16:32 J -32653984.87 -32653984.81 -32653984.76 0.0083 0.0074

Venus -94114-11-19 11:44 J -32653393.17 -32653393.01 -32653392.82 0.0082 0.0048

Venus -94113-07-01 22:03 J -32653167.77 -32653167.58 -32653167.36 0.0082 0.0024

Mars -94108-11-25 01:54 J -32651195.70 -32651195.42 -32651195.10 0.0079 0.0026

Earth -94106-11-11 13:39 J -32650479.16 -32650478.93 -32650478.68 0.0078 0.0023

Moon -94106-11-11 14:51 J -32650479.11 -32650478.88 -32650478.62 0.0078 0.0024 \*

# 94TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 94th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-93963-02-09 07:54 J	-32598523.18	-32598523.17	-32598523.11	0.0060	0.0059		
Mercury	-93963-05-08 09:49 J	-32598435.18	-32598435.09	-32598434.99	0.0060	0.0052		
Mercury	-93963-08-04 10:47 J	-32598347.15	-32598347.05	-32598346.89	0.0060	0.0046		
Mercury	-93963-10-31 12:27 J	-32598259.11	-32598258.98	-32598258.81	0.0060	0.0039		
Mercury	-93962-01-27 14:23 J	-32598171.06	-32598170.90	-32598170.73	0.0060	0.0032		
Mercury	-93962-04-25 15:20 J	-32598083.02	-32598082.86	-32598082.66	0.0060	0.0027		
Mercury	-93962-07-22 17:01 J	-32597994.96	-32597994.79	-32597994.59	0.0060	0.0019		
Mercury	-93962-10-18 18:42 J	-32597906.91	-32597906.72	-32597906.52	0.0060	0.0012		
Mercury	-93961-01-14 20:23 J	-32597818.85	-32597818.65	-32597818.46	0.0060	0.0006		
Mercury	-93961-04-11 21:49 J	-32597730.79	-32597730.59	-32597730.39	0.0060	0.0001		
Mercury	-93961-07-08 23:01 J	-32597642.72	-32597642.54	-32597642.33	0.0060	0.0009		
Mercury	-93961-10-05 00:42 J	-32597554.66	-32597554.47	-32597554.27	0.0060	0.0015		
Mercury	-93960-01-01 02:08 J	-32597466.59	-32597466.41	-32597466.22	0.0060	0.0022		
Mercury	-93960-03-30 03:35 J	-32597378.51	-32597378.35	-32597378.17	0.0061	0.0029		
Mercury	-93960-06-26 04:47 J	-32597290.44	-32597290.30	-32597290.12	0.0061	0.0036		
Mercury	-93960-09-22 06:13 J	-32597202.35	-32597202.24	-32597202.07	0.0061	0.0043		
Mercury	-93960-12-19 07:39 J	-32597114.26	-32597114.18	-32597114.04	0.0061	0.0050		
Mercury	-93959-03-17 09:06 J	-32597026.16	-32597026.12	-32597026.01	0.0061	0.0057		
Venus	-93956-09-04 03:20 J	-32595759.46	-32595759.36	-32595759.22	0.0062	0.0052		

Venus -93955-04-17 07:25 J -32595534.39 -32595534.19 -32595533.96 0.0062 0.0020

Venus -93955-11-28 11:44 J -32595309.23 -32595309.01 -32595308.78 0.0062 0.0013

Venus -93954-07-11 15:35 J -32595083.99 -32595083.85 -32595083.68 0.0062 0.0046

Moon -93943-05-10 16:47 J -32591128.05 -32591127.80 -32591127.52 0.0066 0.0018

Earth -93943-05-10 19:54 J -32591127.92 -32591127.67 -32591127.40 0.0066 0.0018 \*

Mercury -93869-03-01 08:08 J -32564169.22 -32564169.16 -32564169.09 0.0084 0.0073

Mercury -93869-05-28 09:06 J -32564081.20 -32564081.12 -32564081.01 0.0084 0.0061

Mercury -93869-08-24 10:32 J -32563993.16 -32563993.06 -32563992.94 0.0084 0.0048

Mercury -93869-11-20 11:44 J -32563905.12 -32563905.01 -32563904.88 0.0084 0.0035

Mercury -93868-02-16 13:11 J -32563817.07 -32563816.95 -32563816.82 0.0084 0.0022

Mercury -93868-05-15 14:23 J -32563729.03 -32563728.90 -32563728.76 0.0084 0.0010

Mercury -93868-08-11 15:35 J -32563640.98 -32563640.85 -32563640.71 0.0084 0.0004

Mercury -93868-11-07 17:01 J -32563552.92 -32563552.79 -32563552.66 0.0084 0.0015

Mercury -93867-02-03 18:13 J -32563464.87 -32563464.74 -32563464.62 0.0083 0.0027

Mercury -93867-05-02 19:11 J -32563376.81 -32563376.70 -32563376.58 0.0083 0.0039

Mercury -93867-07-29 20:23 J -32563288.75 -32563288.65 -32563288.54 0.0083 0.0051

Mercury -93867-10-25 21:35 J -32563200.68 -32563200.60 -32563200.51 0.0083 0.0063

Mercury -93866-01-21 22:32 J -32563112.60 -32563112.56 -32563112.49 0.0083 0.0075

Venus -93865-06-03 07:25 J -32562614.25 -32562614.19 -32562614.09 0.0082 0.0076

Venus -93864-01-14 18:13 J -32562388.95 -32562388.74 -32562388.53 0.0082 0.0004

Venus -93864-08-28 04:18 J -32562163.43 -32562163.32 -32562163.18 0.0081 0.0066

Moon -93857-11-12 17:15 J -32559530.03 -32559529.78 -32559529.52 0.0077 0.0010

Earth -93857-11-12 19:39 J -32559529.93 -32559529.68 -32559529.43 0.0077 0.0006 \*

Mercury -93715-11-26 13:39 J -32507650.98 -32507650.93 -32507650.85 0.0060 0.0056

Mercury -93714-02-22 14:51 J -32507562.96 -32507562.88 -32507562.75 0.0060 0.0050

Mercury -93714-05-21 16:32 J -32507474.93 -32507474.81 -32507474.66 0.0060 0.0043

Mercury -93714-08-17 18:13 J -32507386.89 -32507386.74 -32507386.58 0.0060 0.0036

Mercury -93714-11-13 19:25 J -32507298.84 -32507298.69 -32507298.50 0.0060 0.0030

Mercury -93713-02-09 21:06 J -32507210.79 -32507210.62 -32507210.43 0.0060 0.0023

Mercury -93713-05-07 22:47 J -32507122.74 -32507122.55 -32507122.36 0.0060 0.0016



Mercury -93713-08-03 23:59 J -32507034.68 -32507034.50 -32507034.29 0.0060 0.0010

Mercury -93713-10-31 01:39 J -32506946.62 -32506946.43 -32506946.23 0.0060 0.0003

Mercury -93712-01-27 03:06 J -32506858.56 -32506858.37 -32506858.17 0.0060 0.0004

Mercury -93712-04-25 04:32 J -32506770.50 -32506770.31 -32506770.11 0.0060 0.0011

Mercury -93712-07-22 05:59 J -32506682.43 -32506682.25 -32506682.05 0.0060 0.0018

Mercury -93712-10-18 07:25 J -32506594.36 -32506594.19 -32506594.00 0.0061 0.0025

Mercury -93711-01-14 08:51 J -32506506.28 -32506506.13 -32506505.94 0.0061 0.0032

Mercury -93711-04-12 10:47 J -32506418.20 -32506418.05 -32506417.90 0.0061 0.0038

Mercury -93711-07-09 11:59 J -32506330.12 -32506330.00 -32506329.86 0.0061 0.0045

Mercury -93711-10-05 13:25 J -32506242.02 -32506241.94 -32506241.82 0.0061 0.0052

Mercury -93710-01-01 15:06 J -32506153.90 -32506153.87 -32506153.81 0.0061 0.0059

Venus -93707-03-20 02:37 J -32504980.42 -32504980.39 -32504980.30 0.0062 0.0060

Venus -93707-10-31 06:42 J -32504755.40 -32504755.22 -32504754.99 0.0062 0.0028

Venus -93706-06-13 11:15 J -32504530.25 -32504530.03 -32504529.80 0.0062 0.0005

Venus -93705-01-24 15:06 J -32504305.03 -32504304.87 -32504304.67 0.0062 0.0038

Mars -93697-12-23 22:18 J -32501048.75 -32501048.57 -32501048.33 0.0066 0.0049

Moon -93694-05-12 21:35 J -32500178.85 -32500178.60 -32500178.32 0.0067 0.0006

Earth -93694-05-13 01:11 J -32500178.70 -32500178.45 -32500178.17 0.0067 0.0010 \*

Mercury -93621-09-19 13:39 J -32473384.95 -32473384.93 -32473384.88 0.0085 0.0082

Mercury -93621-12-16 15:06 J -32473296.94 -32473296.87 -32473296.79 0.0084 0.0069

Mercury -93620-03-14 16:32 J -32473208.91 -32473208.81 -32473208.71 0.0084 0.0056

Mercury -93620-06-10 17:44 J -32473120.87 -32473120.76 -32473120.64 0.0084 0.0043

Mercury -93620-09-06 18:56 J -32473032.83 -32473032.71 -32473032.58 0.0084 0.0031

Mercury -93620-12-03 20:23 J -32472944.78 -32472944.65 -32472944.52 0.0084 0.0018

Mercury -93619-03-01 21:35 J -32472856.73 -32472856.60 -32472856.47 0.0084 0.0006

Mercury -93619-05-28 22:47 J -32472768.68 -32472768.55 -32472768.42 0.0084 0.0006

Mercury -93619-08-24 23:59 J -32472680.63 -32472680.50 -32472680.37 0.0084 0.0019

Mercury -93619-11-21 01:11 J -32472592.57 -32472592.45 -32472592.32 0.0083 0.0031

Mercury -93618-02-17 02:23 J -32472504.51 -32472504.40 -32472504.28 0.0083 0.0043

Mercury -93618-05-16 03:35 J -32472416.44 -32472416.35 -32472416.25 0.0083 0.0055

Mercury -93618-08-12 04:47 J -32472328.37 -32472328.30 -32472328.22 0.0083 0.0066

Mercury -93618-11-08 05:59 J -32472240.29 -32472240.25 -32472240.21 0.0083 0.0078

Venus -93616-07-30 15:49 J -32471610.03 -32471609.84 -32471609.62 0.0082 0.0024

Venus -93615-03-13 01:54 J -32471384.58 -32471384.42 -32471384.22 0.0082 0.0047

Moon -93608-11-15 00:27 J -32468580.68 -32468580.48 -32468580.28 0.0077 0.0045

Earth -93608-11-15 03:06 J -32468580.55 -32468580.37 -32468580.14 0.0077 0.0044 \*

Mercury -93466-09-12 18:56 J -32416778.78 -32416778.71 -32416778.61 0.0060 0.0054

Mercury -93466-12-09 20:37 J -32416690.75 -32416690.64 -32416690.51 0.0060 0.0047

Mercury -93465-03-06 21:49 J -32416602.71 -32416602.59 -32416602.43 0.0060 0.0041

Mercury -93465-06-02 23:30 J -32416514.67 -32416514.52 -32416514.35 0.0060 0.0034

Mercury -93465-08-30 00:42 J -32416426.62 -32416426.47 -32416426.27 0.0060 0.0028

Mercury -93465-11-26 02:23 J -32416338.57 -32416338.40 -32416338.20 0.0060 0.0021

Mercury -93464-02-22 04:03 J -32416250.52 -32416250.33 -32416250.13 0.0060 0.0014

Mercury -93464-05-21 05:30 J -32416162.46 -32416162.27 -32416162.07 0.0060 0.0008

Mercury -93464-08-17 07:11 J -32416074.40 -32416074.20 -32416074.01 0.0060 0.0001

Mercury -93464-11-13 08:23 J -32415986.34 -32415986.15 -32415985.94 0.0060 0.0007

Mercury -93463-02-09 10:03 J -32415898.27 -32415898.08 -32415897.89 0.0060 0.0013

Mercury -93463-05-08 11:30 J -32415810.20 -32415810.02 -32415809.83 0.0060 0.0020

Mercury -93463-08-04 12:42 J -32415722.13 -32415721.97 -32415721.78 0.0061 0.0027

Mercury -93463-10-31 14:08 J -32415634.05 -32415633.91 -32415633.73 0.0061 0.0034

Mercury -93462-01-27 16:03 J -32415545.97 -32415545.83 -32415545.68 0.0061 0.0040

Mercury -93462-04-25 17:30 J -32415457.89 -32415457.77 -32415457.64 0.0061 0.0047

Mercury -93462-07-22 18:56 J -32415369.79 -32415369.71 -32415369.61 0.0061 0.0054

Venus -93458-05-16 05:59 J -32413976.41 -32413976.25 -32413976.04 0.0062 0.0037

Venus -93458-12-27 10:32 J -32413751.29 -32413751.06 -32413750.83 0.0062 0.0005

Venus -93457-08-08 14:08 J -32413526.09 -32413525.91 -32413525.69 0.0062 0.0028

Venus -93456-03-21 18:27 J -32413300.76 -32413300.73 -32413300.67 0.0063 0.0061

Mars -93448-04-01 04:32 J -32410368.59 -32410368.31 -32410367.98 0.0065 0.0021

Earth -93446-05-13 12:27 J -32409596.09 -32409595.98 -32409595.83 0.0066 0.0058

Moon -93446-05-13 14:37 J -32409596.00 -32409595.89 -32409595.73 0.0066 0.0058 \*

Moon -93445-05-14 05:15 J -32409229.50 -32409229.28 -32409229.05 0.0067 0.0033  
 Earth -93445-05-14 05:15 J -32409229.49 -32409229.28 -32409229.03 0.0067 0.0034 \*  
 Mercury -93372-07-06 20:23 J -32382512.68 -32382512.65 -32382512.59 0.0085 0.0080  
 Mercury -93372-10-02 21:49 J -32382424.66 -32382424.59 -32382424.50 0.0084 0.0067  
 Mercury -93372-12-29 23:15 J -32382336.63 -32382336.53 -32382336.43 0.0084 0.0054  
 Mercury -93371-03-28 00:27 J -32382248.59 -32382248.48 -32382248.36 0.0084 0.0041  
 Mercury -93371-06-24 01:39 J -32382160.55 -32382160.43 -32382160.30 0.0084 0.0029  
 Mercury -93371-09-20 03:06 J -32382072.50 -32382072.37 -32382072.24 0.0084 0.0016  
 Mercury -93371-12-17 04:18 J -32381984.45 -32381984.32 -32381984.19 0.0084 0.0004  
 Mercury -93370-03-15 05:30 J -32381896.40 -32381896.27 -32381896.14 0.0084 0.0008  
 Mercury -93370-06-11 06:42 J -32381808.34 -32381808.22 -32381808.09 0.0084 0.0020  
 Mercury -93370-09-07 07:54 J -32381720.29 -32381720.17 -32381720.04 0.0083 0.0033  
 Mercury -93370-12-04 09:06 J -32381632.23 -32381632.12 -32381632.00 0.0083 0.0045  
 Mercury -93369-03-01 10:18 J -32381544.16 -32381544.07 -32381543.97 0.0083 0.0056  
 Mercury -93369-05-28 11:30 J -32381456.09 -32381456.02 -32381455.94 0.0083 0.0068  
 Mercury -93369-08-24 12:42 J -32381368.00 -32381367.97 -32381367.93 0.0083 0.0080  
 Venus -93367-02-12 12:27 J -32380831.14 -32380830.98 -32380830.80 0.0082 0.0048  
 Venus -93367-09-25 23:01 J -32380605.74 -32380605.54 -32380605.33 0.0082 0.0022  
 Mars -93361-08-07 08:08 J -32378463.43 -32378463.16 -32378462.85 0.0078 0.0028  
 Earth -93360-11-15 11:01 J -32377998.17 -32377998.04 -32377997.85 0.0078 0.0059  
 Moon -93360-11-15 13:54 J -32377998.08 -32377997.92 -32377997.72 0.0078 0.0055 \*  
 Moon -93359-11-17 09:06 J -32377631.17 -32377631.12 -32377631.01 0.0077 0.0073  
 Earth -93359-11-17 09:49 J -32377631.10 -32377631.09 -32377631.01 0.0077 0.0076 \*  
 Mercury -93217-04-01 23:59 J -32325994.56 -32325994.50 -32325994.41 0.0060 0.0055  
 Mercury -93217-06-29 01:11 J -32325906.54 -32325906.45 -32325906.31 0.0060 0.0049  
 Mercury -93217-09-25 02:51 J -32325818.50 -32325818.38 -32325818.22 0.0060 0.0042  
 Mercury -93217-12-22 04:47 J -32325730.46 -32325730.30 -32325730.14 0.0060 0.0035  
 Mercury -93216-03-20 05:44 J -32325642.41 -32325642.26 -32325642.07 0.0060 0.0029  
 Mercury -93216-06-16 07:25 J -32325554.36 -32325554.19 -32325554.00 0.0060 0.0022  
 Mercury -93216-09-12 09:06 J -32325466.31 -32325466.12 -32325465.93 0.0060 0.0016

Mercury -93216-12-09 10:18 J -32325378.25 -32325378.07 -32325377.86 0.0060 0.0010

Mercury -93215-03-07 11:59 J -32325290.19 -32325290.00 -32325289.80 0.0060 0.0003

Mercury -93215-06-03 13:39 J -32325202.13 -32325201.93 -32325201.74 0.0060 0.0005

Mercury -93215-08-30 14:51 J -32325114.06 -32325113.88 -32325113.68 0.0060 0.0012

Mercury -93215-11-26 16:18 J -32325026.00 -32325025.82 -32325025.62 0.0060 0.0019

Mercury -93214-02-22 17:44 J -32324937.92 -32324937.76 -32324937.57 0.0061 0.0025

Mercury -93214-05-21 19:25 J -32324849.85 -32324849.69 -32324849.52 0.0061 0.0032

Mercury -93214-08-17 20:51 J -32324761.77 -32324761.63 -32324761.47 0.0061 0.0039

Mercury -93214-11-13 22:18 J -32324673.68 -32324673.57 -32324673.43 0.0061 0.0046

Mercury -93213-02-09 23:44 J -32324585.59 -32324585.51 -32324585.40 0.0061 0.0053

Mercury -93213-05-08 01:11 J -32324497.46 -32324497.45 -32324497.39 0.0061 0.0060

Venus -93210-11-29 07:39 J -32323197.34 -32323197.18 -32323196.99 0.0062 0.0039

Venus -93209-07-11 11:44 J -32322972.23 -32322972.01 -32322971.77 0.0062 0.0008

Venus -93208-02-21 15:49 J -32322747.03 -32322746.84 -32322746.61 0.0062 0.0026

Venus -93208-10-04 19:39 J -32322521.73 -32322521.68 -32322521.57 0.0063 0.0059

Moon -93197-05-14 20:51 J -32318646.87 -32318646.63 -32318646.35 0.0066 0.0024

Earth -93197-05-14 22:03 J -32318646.81 -32318646.58 -32318646.30 0.0066 0.0021 \*

Mercury -93123-01-25 03:35 J -32291728.38 -32291728.35 -32291728.31 0.0085 0.0081

Mercury -93123-04-23 04:47 J -32291640.37 -32291640.30 -32291640.22 0.0084 0.0068

Mercury -93123-07-20 06:13 J -32291552.34 -32291552.24 -32291552.14 0.0084 0.0056

Mercury -93123-10-16 07:25 J -32291464.30 -32291464.19 -32291464.07 0.0084 0.0043

Mercury -93122-01-12 08:37 J -32291376.26 -32291376.14 -32291376.01 0.0084 0.0031

Mercury -93122-04-10 10:03 J -32291288.21 -32291288.08 -32291287.95 0.0084 0.0018

Mercury -93122-07-07 11:15 J -32291200.16 -32291200.03 -32291199.90 0.0084 0.0006

Mercury -93122-10-03 12:27 J -32291112.11 -32291111.98 -32291111.85 0.0084 0.0006

Mercury -93122-12-30 13:39 J -32291024.06 -32291023.93 -32291023.80 0.0084 0.0018

Mercury -93121-03-27 14:51 J -32290936.00 -32290935.88 -32290935.75 0.0083 0.0030

Mercury -93121-06-23 16:03 J -32290847.94 -32290847.83 -32290847.71 0.0083 0.0042

Mercury -93121-09-19 17:15 J -32290759.88 -32290759.78 -32290759.68 0.0083 0.0054

Mercury -93121-12-16 18:27 J -32290671.80 -32290671.73 -32290671.65 0.0083 0.0066

Mercury -93120-03-14 19:25 J -32290583.72 -32290583.69 -32290583.63 0.0083 0.0078

Venus -93119-08-28 13:54 J -32290052.06 -32290051.92 -32290051.74 0.0082 0.0055

Venus -93118-04-11 00:27 J -32289826.68 -32289826.48 -32289826.26 0.0082 0.0016

Mars -93113-11-13 13:11 J -32287783.13 -32287782.95 -32287782.70 0.0079 0.0057

Moon -93111-11-17 23:30 J -32287048.77 -32287048.52 -32287048.26 0.0077 0.0002

Earth -93111-11-18 00:42 J -32287048.71 -32287048.47 -32287048.21 0.0077 0.0005 \*

# 93RD MILLENNIUM BCE

This is a list of transits visible from Pluto in the 93rd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-92969-10-21 05:01 J	-32235210.34	-32235210.29	-32235210.20	0.0060	0.0056		
Mercury	-92968-01-17 06:42 J	-32235122.32	-32235122.22	-32235122.10	0.0060	0.0049		
Mercury	-92968-04-15 07:54 J	-32235034.28	-32235034.17	-32235034.01	0.0060	0.0043		
Mercury	-92968-07-12 09:35 J	-32234946.24	-32234946.10	-32234945.93	0.0060	0.0036		
Mercury	-92968-10-08 11:15 J	-32234858.20	-32234858.03	-32234857.85	0.0060	0.0029		
Mercury	-92967-01-04 12:27 J	-32234770.15	-32234769.98	-32234769.78	0.0060	0.0023		
Mercury	-92967-04-02 14:08 J	-32234682.09	-32234681.91	-32234681.71	0.0060	0.0016		
Mercury	-92967-06-29 15:49 J	-32234594.04	-32234593.84	-32234593.65	0.0060	0.0010		
Mercury	-92967-09-25 17:15 J	-32234505.98	-32234505.78	-32234505.58	0.0060	0.0003		
Mercury	-92967-12-22 18:42 J	-32234417.91	-32234417.72	-32234417.52	0.0060	0.0004		
Mercury	-92966-03-20 20:08 J	-32234329.85	-32234329.66	-32234329.46	0.0060	0.0011		
Mercury	-92966-06-16 21:35 J	-32234241.78	-32234241.60	-32234241.40	0.0060	0.0018		

Mercury -92966-09-12 23:01 J -32234153.71 -32234153.54 -32234153.35 0.0061 0.0025

Mercury -92966-12-10 00:13 J -32234065.63 -32234065.49 -32234065.30 0.0061 0.0032

Mercury -92965-03-07 02:08 J -32233977.56 -32233977.41 -32233977.25 0.0061 0.0038

Mercury -92965-06-03 03:35 J -32233889.47 -32233889.35 -32233889.21 0.0061 0.0045

Mercury -92965-08-30 05:01 J -32233801.38 -32233801.29 -32233801.17 0.0061 0.0052

Mercury -92965-11-26 06:27 J -32233713.26 -32233713.23 -32233713.16 0.0061 0.0059

Venus -92961-06-13 09:35 J -32232418.25 -32232418.10 -32232417.91 0.0062 0.0041

Venus -92960-01-24 13:54 J -32232193.14 -32232192.92 -32232192.69 0.0062 0.0009

Venus -92960-09-06 17:59 J -32231967.95 -32231967.75 -32231967.53 0.0062 0.0023

Venus -92959-04-19 22:18 J -32231742.67 -32231742.57 -32231742.47 0.0063 0.0056

Moon -92948-05-17 04:18 J -32227697.56 -32227697.32 -32227697.05 0.0067 0.0018

Earth -92948-05-17 08:08 J -32227697.41 -32227697.16 -32227696.89 0.0067 0.0019 \*

Mercury -92875-08-15 10:47 J -32200944.08 -32200944.05 -32200944.02 0.0085 0.0082

Mercury -92875-11-11 11:44 J -32200856.07 -32200856.01 -32200855.93 0.0084 0.0070

Mercury -92874-02-07 13:11 J -32200768.04 -32200767.95 -32200767.85 0.0084 0.0057

Mercury -92874-05-06 14:23 J -32200680.01 -32200679.90 -32200679.78 0.0084 0.0044

Mercury -92874-08-02 15:35 J -32200591.96 -32200591.85 -32200591.72 0.0084 0.0032

Mercury -92874-10-29 17:01 J -32200503.92 -32200503.79 -32200503.66 0.0084 0.0019

Mercury -92873-01-25 18:13 J -32200415.87 -32200415.74 -32200415.61 0.0084 0.0007

Mercury -92873-04-22 19:25 J -32200327.82 -32200327.69 -32200327.56 0.0084 0.0005

Mercury -92873-07-19 20:37 J -32200239.76 -32200239.64 -32200239.51 0.0084 0.0017

Mercury -92873-10-15 21:49 J -32200151.71 -32200151.59 -32200151.46 0.0083 0.0029

Mercury -92872-01-11 23:01 J -32200063.65 -32200063.54 -32200063.42 0.0083 0.0041

Mercury -92872-04-10 00:13 J -32199975.58 -32199975.49 -32199975.38 0.0083 0.0053

Mercury -92872-07-07 01:25 J -32199887.51 -32199887.44 -32199887.35 0.0083 0.0065

Mercury -92872-10-03 02:23 J -32199799.43 -32199799.40 -32199799.34 0.0083 0.0077

Venus -92870-03-13 15:35 J -32199272.98 -32199272.85 -32199272.68 0.0082 0.0059

Venus -92870-10-25 02:23 J -32199047.61 -32199047.40 -32199047.18 0.0082 0.0012

Venus -92869-06-06 12:13 J -32198821.99 -32198821.99 -32198821.96 0.0081 0.0081

Jupiter -92865-08-04 06:27 J -32197302.69 -32197302.23 -32197301.70 0.0079 0.0026

Moon -92862-11-20 11:15 J -32196099.20 -32196099.03 -32196098.82 0.0077 0.0050  
 Earth -92862-11-20 14:37 J -32196099.04 -32196098.89 -32196098.69 0.0077 0.0054 \*  
 Mercury -92720-02-12 10:32 J -32144514.08 -32144514.06 -32144514.04 0.0060 0.0059  
 Mercury -92720-05-11 11:30 J -32144426.09 -32144426.02 -32144425.91 0.0060 0.0053  
 Mercury -92720-08-07 13:11 J -32144338.06 -32144337.95 -32144337.82 0.0060 0.0046  
 Mercury -92720-11-03 14:23 J -32144250.02 -32144249.90 -32144249.73 0.0060 0.0040  
 Mercury -92719-01-30 16:03 J -32144161.98 -32144161.83 -32144161.65 0.0060 0.0033  
 Mercury -92719-04-28 17:15 J -32144073.93 -32144073.78 -32144073.58 0.0060 0.0027  
 Mercury -92719-07-25 18:56 J -32143985.88 -32143985.71 -32143985.51 0.0060 0.0020  
 Mercury -92719-10-21 20:37 J -32143897.83 -32143897.64 -32143897.44 0.0060 0.0013  
 Mercury -92718-01-17 22:18 J -32143809.77 -32143809.57 -32143809.38 0.0060 0.0007  
 Mercury -92718-04-15 23:44 J -32143721.71 -32143721.51 -32143721.31 0.0060 0.0000  
 Mercury -92718-07-13 01:11 J -32143633.64 -32143633.45 -32143633.25 0.0060 0.0007  
 Mercury -92718-10-09 02:37 J -32143545.58 -32143545.39 -32143545.19 0.0060 0.0014  
 Mercury -92717-01-05 04:03 J -32143457.51 -32143457.33 -32143457.14 0.0061 0.0021  
 Mercury -92717-04-02 05:15 J -32143369.44 -32143369.28 -32143369.08 0.0061 0.0028  
 Mercury -92717-06-29 07:11 J -32143281.36 -32143281.20 -32143281.03 0.0061 0.0034  
 Mercury -92717-09-25 08:37 J -32143193.28 -32143193.14 -32143192.99 0.0061 0.0041  
 Mercury -92717-12-22 10:03 J -32143105.19 -32143105.08 -32143104.95 0.0061 0.0048  
 Mercury -92716-03-20 11:30 J -32143017.09 -32143017.02 -32143016.92 0.0061 0.0055  
 Venus -92713-12-27 13:39 J -32141639.09 -32141638.93 -32141638.71 0.0062 0.0037  
 Venus -92712-08-09 18:13 J -32141413.96 -32141413.74 -32141413.50 0.0062 0.0004  
 Venus -92711-03-22 22:18 J -32141188.76 -32141188.57 -32141188.35 0.0062 0.0029  
 Venus -92711-11-03 01:54 J -32140963.43 -32140963.42 -32140963.34 0.0063 0.0062  
 Earth -92700-05-18 06:13 J -32137114.47 -32137114.24 -32137113.96 0.0067 0.0021  
 Moon -92700-05-18 09:35 J -32137114.33 -32137114.10 -32137113.83 0.0067 0.0024 \*  
 Mercury -92626-03-05 18:56 J -32110159.76 -32110159.71 -32110159.65 0.0084 0.0075  
 Mercury -92626-06-01 20:08 J -32110071.74 -32110071.66 -32110071.56 0.0084 0.0062  
 Mercury -92626-08-28 21:35 J -32109983.71 -32109983.60 -32109983.49 0.0084 0.0050  
 Mercury -92626-11-24 22:47 J -32109895.66 -32109895.55 -32109895.43 0.0084 0.0037

Mercury -92625-02-20 23:59 J -32109807.62 -32109807.50 -32109807.37 0.0084 0.0025

Mercury -92625-05-19 01:25 J -32109719.57 -32109719.44 -32109719.31 0.0084 0.0013

Mercury -92625-08-15 02:37 J -32109631.52 -32109631.39 -32109631.26 0.0084 0.0001

Mercury -92625-11-11 03:49 J -32109543.47 -32109543.34 -32109543.21 0.0084 0.0012

Mercury -92624-02-07 05:01 J -32109455.41 -32109455.29 -32109455.16 0.0083 0.0024

Mercury -92624-05-06 05:59 J -32109367.36 -32109367.25 -32109367.12 0.0083 0.0037

Mercury -92624-08-02 07:11 J -32109279.29 -32109279.20 -32109279.08 0.0083 0.0048

Mercury -92624-10-29 08:37 J -32109191.23 -32109191.14 -32109191.05 0.0083 0.0060

Mercury -92623-01-25 09:49 J -32109103.15 -32109103.09 -32109103.02 0.0083 0.0071

Venus -92622-09-26 22:32 J -32108493.74 -32108493.56 -32108493.38 0.0082 0.0044

Venus -92621-05-09 08:51 J -32108268.33 -32108268.13 -32108267.93 0.0082 0.0025

Earth -92614-11-21 12:27 J -32105516.23 -32105515.98 -32105515.73 0.0077 0.0003

Moon -92614-11-21 15:49 J -32105516.09 -32105515.84 -32105515.59 0.0077 0.0001 \*

Mercury -92472-09-02 16:32 J -32053729.86 -32053729.81 -32053729.72 0.0060 0.0056

Mercury -92472-11-29 17:44 J -32053641.84 -32053641.76 -32053641.62 0.0060 0.0050

Mercury -92471-02-25 19:25 J -32053553.81 -32053553.69 -32053553.53 0.0060 0.0043

Mercury -92471-05-24 21:20 J -32053465.76 -32053465.61 -32053465.45 0.0060 0.0036

Mercury -92471-08-20 22:32 J -32053377.72 -32053377.56 -32053377.38 0.0060 0.0030

Mercury -92471-11-17 00:13 J -32053289.67 -32053289.49 -32053289.31 0.0060 0.0023

Mercury -92470-02-13 01:25 J -32053201.61 -32053201.44 -32053201.24 0.0060 0.0017

Mercury -92470-05-12 03:06 J -32053113.56 -32053113.37 -32053113.17 0.0060 0.0010

Mercury -92470-08-08 04:47 J -32053025.50 -32053025.30 -32053025.10 0.0060 0.0003

Mercury -92470-11-04 06:13 J -32052937.44 -32052937.24 -32052937.04 0.0060 0.0003

Mercury -92469-01-31 07:25 J -32052849.37 -32052849.19 -32052848.98 0.0060 0.0011

Mercury -92469-04-28 09:06 J -32052761.30 -32052761.12 -32052760.92 0.0061 0.0017

Mercury -92469-07-25 10:32 J -32052673.23 -32052673.06 -32052672.87 0.0061 0.0024

Mercury -92469-10-21 11:59 J -32052585.16 -32052585.00 -32052584.82 0.0061 0.0031

Mercury -92468-01-17 13:11 J -32052497.08 -32052496.95 -32052496.77 0.0061 0.0038

Mercury -92468-04-15 14:37 J -32052408.99 -32052408.89 -32052408.73 0.0061 0.0045

Mercury -92468-07-12 16:47 J -32052320.90 -32052320.80 -32052320.69 0.0061 0.0051



Mercury -92468-10-08 18:13 J -32052232.79 -32052232.74 -32052232.68 0.0061 0.0058

Venus -92465-11-29 14:37 J -32051084.89 -32051084.89 -32051084.87 0.0062 0.0062

Venus -92464-07-12 18:42 J -32050859.91 -32050859.72 -32050859.51 0.0062 0.0030

Venus -92463-02-22 23:01 J -32050634.76 -32050634.54 -32050634.31 0.0062 0.0002

Venus -92463-10-06 03:06 J -32050409.55 -32050409.37 -32050409.17 0.0062 0.0034

Jupiter -92456-12-23 16:18 J -32047774.23 -32047773.82 -32047773.27 0.0065 0.0039

Mars -92453-03-23 05:44 J -32046953.42 -32046953.26 -32046953.04 0.0066 0.0053

Moon -92452-05-19 01:39 J -32046531.51 -32046531.43 -32046531.29 0.0066 0.0061

Earth -92452-05-19 04:03 J -32046531.41 -32046531.33 -32046531.17 0.0066 0.0060 \*

Earth -92451-05-20 21:06 J -32046164.83 -32046164.62 -32046164.36 0.0067 0.0033

Moon -92451-05-20 21:20 J -32046164.83 -32046164.61 -32046164.34 0.0067 0.0033 \*

Mercury -92378-06-28 02:08 J -32019463.45 -32019463.41 -32019463.37 0.0085 0.0080

Mercury -92378-09-24 03:06 J -32019375.43 -32019375.37 -32019375.28 0.0084 0.0068

Mercury -92378-12-21 04:47 J -32019287.40 -32019287.30 -32019287.20 0.0084 0.0055

Mercury -92377-03-18 05:44 J -32019199.36 -32019199.26 -32019199.14 0.0084 0.0043

Mercury -92377-06-14 07:11 J -32019111.32 -32019111.20 -32019111.07 0.0084 0.0030

Mercury -92377-09-10 08:23 J -32019023.27 -32019023.15 -32019023.02 0.0084 0.0018

Mercury -92377-12-07 09:49 J -32018935.23 -32018935.09 -32018934.96 0.0084 0.0006

Mercury -92376-03-05 11:01 J -32018847.17 -32018847.04 -32018846.91 0.0084 0.0007

Mercury -92376-06-01 12:13 J -32018759.12 -32018758.99 -32018758.86 0.0084 0.0019

Mercury -92376-08-28 13:11 J -32018671.06 -32018670.95 -32018670.82 0.0083 0.0032

Mercury -92376-11-24 14:23 J -32018583.00 -32018582.90 -32018582.78 0.0083 0.0043

Mercury -92375-02-20 15:35 J -32018494.94 -32018494.85 -32018494.74 0.0083 0.0055

Mercury -92375-05-19 17:01 J -32018406.87 -32018406.79 -32018406.71 0.0083 0.0066

Mercury -92375-08-15 17:59 J -32018318.78 -32018318.75 -32018318.70 0.0083 0.0078

Venus -92373-04-11 05:01 J -32017714.48 -32017714.29 -32017714.08 0.0082 0.0030

Venus -92373-11-22 15:06 J -32017489.04 -32017488.87 -32017488.67 0.0082 0.0040

Moon -92366-11-22 07:25 J -32014933.34 -32014933.19 -32014933.00 0.0078 0.0055

Earth -92366-11-22 10:03 J -32014933.24 -32014933.08 -32014932.91 0.0078 0.0058 \*

Moon -92365-11-23 10:32 J -32014566.12 -32014566.06 -32014565.97 0.0077 0.0074

Mercury -92224-12-25 23:01 J -31963033.60 -31963033.54 -31963033.47 0.0060 0.0056

Mercury -92223-03-24 00:13 J -31962945.58 -31962945.49 -31962945.36 0.0060 0.0050

Mercury -92223-06-20 01:54 J -31962857.55 -31962857.42 -31962857.28 0.0060 0.0043

Mercury -92223-09-16 03:06 J -31962769.51 -31962769.37 -31962769.20 0.0060 0.0037

Mercury -92223-12-13 04:47 J -31962681.46 -31962681.30 -31962681.12 0.0060 0.0030

Mercury -92222-03-11 06:27 J -31962593.41 -31962593.23 -31962593.05 0.0060 0.0024

Mercury -92222-06-07 07:39 J -31962505.36 -31962505.18 -31962504.98 0.0060 0.0017

Mercury -92222-09-03 09:20 J -31962417.30 -31962417.11 -31962416.91 0.0060 0.0010

Mercury -92222-11-30 11:01 J -31962329.24 -31962329.04 -31962328.85 0.0060 0.0004

Mercury -92221-02-26 12:27 J -31962241.18 -31962240.98 -31962240.78 0.0060 0.0003

Mercury -92221-05-24 13:54 J -31962153.11 -31962152.92 -31962152.72 0.0060 0.0010

Mercury -92221-08-20 15:20 J -31962065.05 -31962064.86 -31962064.67 0.0061 0.0017

Mercury -92221-11-16 16:32 J -31961976.97 -31961976.81 -31961976.61 0.0061 0.0024

Mercury -92220-02-12 17:59 J -31961888.90 -31961888.75 -31961888.56 0.0061 0.0031

Mercury -92220-05-11 19:54 J -31961800.82 -31961800.67 -31961800.51 0.0061 0.0037

Mercury -92220-08-07 21:20 J -31961712.74 -31961712.61 -31961712.47 0.0061 0.0044

Mercury -92220-11-03 22:47 J -31961624.65 -31961624.55 -31961624.43 0.0061 0.0051

Mercury -92219-01-31 00:13 J -31961536.53 -31961536.49 -31961536.42 0.0061 0.0058

Venus -92216-06-14 20:51 J -31960305.73 -31960305.63 -31960305.47 0.0062 0.0051

Venus -92215-01-26 01:25 J -31960080.64 -31960080.44 -31960080.21 0.0062 0.0019

Venus -92215-09-08 05:30 J -31959855.48 -31959855.27 -31959855.03 0.0062 0.0013

Venus -92214-04-21 09:20 J -31959630.24 -31959630.11 -31959629.93 0.0063 0.0046

Mars -92205-06-30 11:44 J -31956272.26 -31956272.01 -31956271.73 0.0066 0.0037

Earth -92203-05-22 00:13 J -31955581.76 -31955581.49 -31955581.22 0.0067 0.0005

Moon -92203-05-22 01:25 J -31955581.69 -31955581.44 -31955581.18 0.0067 0.0002 \*

Mercury -92130-10-20 10:03 J -31928767.12 -31928767.08 -31928767.03 0.0084 0.0079

Mercury -92129-01-16 11:15 J -31928679.10 -31928679.03 -31928678.94 0.0084 0.0066

Mercury -92129-04-13 12:42 J -31928591.07 -31928590.97 -31928590.86 0.0084 0.0054

Mercury -92129-07-10 13:54 J -31928503.03 -31928502.92 -31928502.80 0.0084 0.0041

Mercury -92129-10-06 15:06 J -31928414.98 -31928414.87 -31928414.74 0.0084 0.0029

Mercury	-92128-01-02 16:32 J	-31928326.94	-31928326.81	-31928326.68	0.0084	0.0016
Mercury	-92128-03-31 17:44 J	-31928238.89	-31928238.76	-31928238.62	0.0084	0.0005
Mercury	-92128-06-27 18:56 J	-31928150.84	-31928150.71	-31928150.57	0.0084	0.0009
Mercury	-92128-09-23 20:23 J	-31928062.78	-31928062.65	-31928062.52	0.0083	0.0020
Mercury	-92128-12-20 21:35 J	-31927974.72	-31927974.60	-31927974.48	0.0083	0.0032
Mercury	-92127-03-18 22:47 J	-31927886.66	-31927886.55	-31927886.44	0.0083	0.0044
Mercury	-92127-06-14 23:59 J	-31927798.60	-31927798.50	-31927798.40	0.0083	0.0055
Mercury	-92127-09-11 00:56 J	-31927710.53	-31927710.46	-31927710.37	0.0083	0.0067
Mercury	-92127-12-08 02:08 J	-31927622.44	-31927622.41	-31927622.36	0.0083	0.0079
Venus	-92125-03-14 04:47 J	-31927160.39	-31927160.30	-31927160.20	0.0082	0.0073
Venus	-92125-10-25 15:06 J	-31926935.08	-31926934.87	-31926934.65	0.0082	0.0004
Venus	-92124-06-08 00:56 J	-31926709.57	-31926709.46	-31926709.31	0.0081	0.0066
Earth	-92117-11-24 11:30 J	-31923983.22	-31923983.02	-31923982.78	0.0077	0.0038
Moon	-92117-11-24 12:13 J	-31923983.19	-31923982.99	-31923982.77	0.0077	0.0039 *

# 92ND MILLENNIUM BCE

This is a list of transits visible from Pluto in the 92nd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-91975-04-19 05:15 J	-31872337.34	-31872337.28	-31872337.21	0.0060	0.0056		
Mercury	-91975-07-16 06:13 J	-31872249.32	-31872249.24	-31872249.11	0.0060	0.0050		
Mercury	-91975-10-12 08:08 J	-31872161.29	-31872161.16	-31872161.02	0.0060	0.0043		
Mercury	-91974-01-08 09:06 J	-31872073.25	-31872073.12	-31872072.94	0.0060	0.0037		

Mercury -91974-04-06 10:47 J -31871985.21 -31871985.05 -31871984.87 0.0060 0.0031

Mercury -91974-07-03 12:13 J -31871897.16 -31871896.99 -31871896.79 0.0060 0.0024

Mercury -91974-09-29 13:54 J -31871809.10 -31871808.92 -31871808.72 0.0060 0.0017

Mercury -91974-12-26 15:20 J -31871721.05 -31871720.86 -31871720.66 0.0060 0.0011

Mercury -91973-03-23 17:01 J -31871632.99 -31871632.79 -31871632.59 0.0060 0.0004

Mercury -91973-06-19 18:27 J -31871544.93 -31871544.73 -31871544.53 0.0060 0.0003

Mercury -91973-09-15 19:54 J -31871456.86 -31871456.67 -31871456.47 0.0060 0.0010

Mercury -91973-12-12 21:20 J -31871368.79 -31871368.61 -31871368.41 0.0061 0.0017

Mercury -91972-03-10 22:32 J -31871280.72 -31871280.56 -31871280.36 0.0061 0.0024

Mercury -91972-06-07 00:27 J -31871192.65 -31871192.48 -31871192.31 0.0061 0.0030

Mercury -91972-09-03 01:54 J -31871104.57 -31871104.42 -31871104.26 0.0061 0.0037

Mercury -91972-11-30 03:06 J -31871016.49 -31871016.37 -31871016.22 0.0061 0.0044

Mercury -91971-02-26 04:32 J -31870928.39 -31870928.31 -31870928.18 0.0061 0.0051

Mercury -91971-05-25 05:59 J -31870840.28 -31870840.25 -31870840.16 0.0061 0.0058

Venus -91968-12-29 04:18 J -31869526.50 -31869526.32 -31869526.15 0.0062 0.0040

Venus -91967-08-11 08:08 J -31869301.38 -31869301.16 -31869300.93 0.0062 0.0008

Venus -91966-03-24 12:13 J -31869076.18 -31869075.99 -31869075.76 0.0062 0.0024

Venus -91966-11-04 16:03 J -31868850.90 -31868850.83 -31868850.70 0.0063 0.0057

Mars -91957-10-07 17:59 J -31865591.03 -31865590.75 -31865590.42 0.0066 0.0021

Moon -91955-05-23 00:27 J -31864998.74 -31864998.48 -31864998.22 0.0067 0.0024

Earth -91955-05-23 02:37 J -31864998.63 -31864998.39 -31864998.13 0.0067 0.0023 \*

Mercury -91881-02-11 17:59 J -31838070.78 -31838070.75 -31838070.68 0.0084 0.0078

Mercury -91881-05-09 19:39 J -31837982.76 -31837982.68 -31837982.60 0.0084 0.0065

Mercury -91881-08-05 20:51 J -31837894.73 -31837894.63 -31837894.52 0.0084 0.0052

Mercury -91881-11-01 22:03 J -31837806.69 -31837806.58 -31837806.46 0.0084 0.0040

Mercury -91880-01-28 23:30 J -31837718.64 -31837718.52 -31837718.39 0.0084 0.0027

Mercury -91880-04-27 00:42 J -31837630.60 -31837630.47 -31837630.34 0.0084 0.0015

Mercury -91880-07-24 01:54 J -31837542.55 -31837542.42 -31837542.28 0.0084 0.0004

Mercury -91880-10-20 03:06 J -31837454.49 -31837454.37 -31837454.23 0.0084 0.0010

Mercury -91879-01-16 04:18 J -31837366.44 -31837366.32 -31837366.18 0.0083 0.0022

Mercury -91879-04-14 05:30 J -31837278.38 -31837278.27 -31837278.14 0.0083 0.0034  
 Mercury -91879-07-11 06:42 J -31837190.32 -31837190.22 -31837190.10 0.0083 0.0045  
 Mercury -91879-10-07 07:54 J -31837102.26 -31837102.17 -31837102.06 0.0083 0.0057  
 Mercury -91878-01-03 09:20 J -31837014.18 -31837014.11 -31837014.04 0.0083 0.0068  
 Mercury -91878-04-01 10:18 J -31836926.09 -31836926.07 -31836926.03 0.0083 0.0080  
 Venus -91877-09-27 14:51 J -31836381.05 -31836380.88 -31836380.69 0.0082 0.0044  
 Venus -91876-05-11 01:11 J -31836155.65 -31836155.45 -31836155.24 0.0082 0.0025  
 Moon -91869-11-25 12:42 J -31833400.22 -31833399.97 -31833399.71 0.0077 0.0005  
 Earth -91869-11-25 14:51 J -31833400.13 -31833399.88 -31833399.63 0.0077 0.0001 \*  
 Mercury -91727-05-15 11:01 J -31781729.04 -31781729.04 -31781729.02 0.0060 0.0060  
 Mercury -91727-08-11 12:27 J -31781641.06 -31781640.98 -31781640.89 0.0060 0.0053  
 Mercury -91727-11-07 13:39 J -31781553.03 -31781552.93 -31781552.79 0.0060 0.0047  
 Mercury -91726-02-03 15:20 J -31781465.00 -31781464.86 -31781464.71 0.0060 0.0040  
 Mercury -91726-05-02 16:32 J -31781376.95 -31781376.81 -31781376.63 0.0060 0.0034  
 Mercury -91726-07-29 18:13 J -31781288.91 -31781288.74 -31781288.56 0.0060 0.0027  
 Mercury -91726-10-25 19:25 J -31781200.86 -31781200.69 -31781200.49 0.0060 0.0021  
 Mercury -91725-01-21 21:06 J -31781112.80 -31781112.62 -31781112.42 0.0060 0.0014  
 Mercury -91725-04-18 22:47 J -31781024.74 -31781024.55 -31781024.35 0.0060 0.0007  
 Mercury -91725-07-16 00:13 J -31780936.68 -31780936.49 -31780936.29 0.0060 0.0001  
 Mercury -91725-10-12 01:39 J -31780848.62 -31780848.43 -31780848.23 0.0060 0.0006  
 Mercury -91724-01-08 03:06 J -31780760.56 -31780760.37 -31780760.17 0.0061 0.0013  
 Mercury -91724-04-06 04:32 J -31780672.49 -31780672.31 -31780672.11 0.0061 0.0020  
 Mercury -91724-07-03 05:44 J -31780584.41 -31780584.26 -31780584.06 0.0061 0.0027  
 Mercury -91724-09-29 07:39 J -31780496.34 -31780496.18 -31780496.01 0.0061 0.0033  
 Mercury -91724-12-26 09:06 J -31780408.26 -31780408.12 -31780407.96 0.0061 0.0040  
 Mercury -91723-03-24 10:32 J -31780320.17 -31780320.06 -31780319.92 0.0061 0.0047  
 Mercury -91723-06-20 11:44 J -31780232.07 -31780232.01 -31780231.89 0.0061 0.0054  
 Mercury -91723-09-16 13:39 J -31780143.93 -31780143.93 -31780143.91 0.0061 0.0061  
 Venus -91720-12-01 08:37 J -31778972.23 -31778972.14 -31778972.02 0.0062 0.0054  
 Venus -91719-07-14 12:42 J -31778747.17 -31778746.97 -31778746.74 0.0062 0.0023

Venus -91718-02-24 17:15 J -31778522.00 -31778521.78 -31778521.55 0.0062 0.0009

Venus -91718-10-07 21:20 J -31778296.77 -31778296.61 -31778296.43 0.0063 0.0041

Mars -91708-01-15 06:56 J -31774909.50 -31774909.21 -31774908.88 0.0066 0.0019

Earth -91707-05-24 08:51 J -31774415.34 -31774415.13 -31774414.91 0.0066 0.0040

Moon -91707-05-24 12:13 J -31774415.20 -31774414.99 -31774414.76 0.0066 0.0037 \*

Moon -91706-05-25 21:49 J -31774048.74 -31774048.59 -31774048.39 0.0067 0.0050

Earth -91706-05-26 01:39 J -31774048.58 -31774048.43 -31774048.26 0.0067 0.0053 \*

Mercury -91633-03-09 01:39 J -31747462.43 -31747462.43 -31747462.39 0.0085 0.0084

Mercury -91633-06-05 03:06 J -31747374.43 -31747374.37 -31747374.29 0.0084 0.0071

Mercury -91633-09-01 04:18 J -31747286.40 -31747286.32 -31747286.21 0.0084 0.0059

Mercury -91633-11-28 05:30 J -31747198.36 -31747198.27 -31747198.14 0.0084 0.0047

Mercury -91632-02-24 07:11 J -31747110.32 -31747110.20 -31747110.08 0.0084 0.0033

Mercury -91632-05-23 08:23 J -31747022.28 -31747022.15 -31747022.02 0.0084 0.0021

Mercury -91632-08-19 09:35 J -31746934.23 -31746934.10 -31746933.96 0.0084 0.0009

Mercury -91632-11-15 11:01 J -31746846.18 -31746846.04 -31746845.91 0.0084 0.0004

Mercury -91631-02-11 11:59 J -31746758.12 -31746758.00 -31746757.86 0.0084 0.0016

Mercury -91631-05-10 13:11 J -31746670.07 -31746669.95 -31746669.82 0.0083 0.0028

Mercury -91631-08-06 14:23 J -31746582.01 -31746581.90 -31746581.77 0.0083 0.0040

Mercury -91631-11-02 15:35 J -31746493.94 -31746493.85 -31746493.74 0.0083 0.0051

Mercury -91630-01-29 16:47 J -31746405.87 -31746405.80 -31746405.70 0.0083 0.0063

Mercury -91630-04-27 18:13 J -31746317.79 -31746317.74 -31746317.68 0.0083 0.0074

Venus -91629-08-30 17:15 J -31745826.85 -31745826.78 -31745826.68 0.0082 0.0075

Venus -91628-04-13 04:03 J -31745601.55 -31745601.33 -31745601.12 0.0082 0.0006

Venus -91628-11-24 13:54 J -31745376.04 -31745375.92 -31745375.77 0.0081 0.0062

Earth -91621-11-26 21:06 J -31742816.84 -31742816.62 -31742816.36 0.0078 0.0025

Moon -91621-11-26 23:44 J -31742816.73 -31742816.51 -31742816.26 0.0078 0.0024 \*

Mercury -91479-09-06 17:44 J -31691032.79 -31691032.76 -31691032.67 0.0060 0.0057

Mercury -91479-12-03 19:25 J -31690944.78 -31690944.69 -31690944.56 0.0060 0.0050

Mercury -91478-03-01 20:37 J -31690856.74 -31690856.64 -31690856.48 0.0060 0.0044

Mercury -91478-05-28 22:18 J -31690768.70 -31690768.57 -31690768.40 0.0060 0.0038

Mercury -91478-08-25 00:13 J -31690680.66 -31690680.49 -31690680.32 0.0060 0.0031

Mercury -91478-11-21 01:25 J -31690592.61 -31690592.44 -31690592.25 0.0060 0.0024

Mercury -91477-02-17 03:06 J -31690504.56 -31690504.37 -31690504.18 0.0060 0.0017

Mercury -91477-05-15 04:18 J -31690416.50 -31690416.32 -31690416.11 0.0060 0.0011

Mercury -91477-08-11 05:59 J -31690328.44 -31690328.25 -31690328.05 0.0060 0.0004

Mercury -91477-11-07 07:39 J -31690240.38 -31690240.18 -31690239.99 0.0060 0.0003

Mercury -91476-02-03 08:51 J -31690152.32 -31690152.13 -31690151.93 0.0061 0.0009

Mercury -91476-05-02 10:32 J -31690064.25 -31690064.06 -31690063.87 0.0061 0.0016

Mercury -91476-07-29 11:44 J -31689976.18 -31689976.01 -31689975.82 0.0061 0.0023

Mercury -91476-10-25 13:11 J -31689888.11 -31689887.95 -31689887.76 0.0061 0.0030

Mercury -91475-01-21 14:37 J -31689800.03 -31689799.89 -31689799.72 0.0061 0.0037

Mercury -91475-04-19 16:32 J -31689711.95 -31689711.81 -31689711.67 0.0061 0.0043

Mercury -91475-07-16 17:44 J -31689623.86 -31689623.76 -31689623.64 0.0061 0.0050

Mercury -91475-10-12 19:11 J -31689535.75 -31689535.70 -31689535.62 0.0061 0.0057

Venus -91471-06-16 17:30 J -31688192.94 -31688192.77 -31688192.58 0.0062 0.0037

Venus -91470-01-27 21:49 J -31687967.81 -31687967.59 -31687967.36 0.0062 0.0006

Venus -91470-09-10 01:39 J -31687742.62 -31687742.43 -31687742.20 0.0062 0.0027

Venus -91469-04-22 05:30 J -31687517.31 -31687517.27 -31687517.15 0.0063 0.0059

Mars -91460-04-24 20:37 J -31684227.92 -31684227.64 -31684227.30 0.0066 0.0019

Moon -91459-05-25 11:15 J -31683832.14 -31683832.03 -31683831.84 0.0066 0.0055

Earth -91459-05-25 14:51 J -31683831.98 -31683831.88 -31683831.70 0.0066 0.0057 \*

Earth -91458-05-27 08:08 J -31683465.37 -31683465.16 -31683464.92 0.0067 0.0037

Moon -91458-05-27 11:15 J -31683465.24 -31683465.03 -31683464.78 0.0067 0.0035 \*

Mercury -91385-07-01 11:01 J -31656766.09 -31656766.04 -31656765.97 0.0084 0.0075

Mercury -91385-09-27 12:27 J -31656678.06 -31656677.98 -31656677.89 0.0084 0.0063

Mercury -91385-12-24 13:39 J -31656590.03 -31656589.93 -31656589.82 0.0084 0.0050

Mercury -91384-03-22 14:51 J -31656501.99 -31656501.88 -31656501.75 0.0084 0.0038

Mercury -91384-06-18 16:18 J -31656413.94 -31656413.82 -31656413.69 0.0084 0.0026

Mercury -91384-09-14 17:30 J -31656325.90 -31656325.77 -31656325.63 0.0084 0.0014

Mercury -91384-12-11 18:56 J -31656237.84 -31656237.71 -31656237.58 0.0084 0.0002

Mercury -91383-03-09 20:08 J -31656149.79 -31656149.66 -31656149.53 0.0084 0.0011

Mercury -91383-06-05 21:20 J -31656061.74 -31656061.61 -31656061.48 0.0083 0.0023

Mercury -91383-09-01 22:32 J -31655973.68 -31655973.56 -31655973.44 0.0083 0.0035

Mercury -91383-11-28 23:44 J -31655885.62 -31655885.51 -31655885.40 0.0083 0.0047

Mercury -91382-02-25 00:56 J -31655797.55 -31655797.46 -31655797.36 0.0083 0.0058

Mercury -91382-05-24 01:54 J -31655709.47 -31655709.42 -31655709.34 0.0083 0.0070

Mercury -91382-08-20 03:06 J -31655621.38 -31655621.37 -31655621.33 0.0083 0.0082

Venus -91380-03-16 07:11 J -31655047.38 -31655047.20 -31655046.99 0.0082 0.0034

Venus -91380-10-27 17:30 J -31654821.95 -31654821.77 -31654821.56 0.0082 0.0035

Moon -91373-11-28 01:39 J -31652233.61 -31652233.43 -31652233.22 0.0078 0.0048

Earth -91373-11-28 05:15 J -31652233.47 -31652233.28 -31652233.06 0.0078 0.0044 \*

Mercury -91231-10-03 01:11 J -31600424.50 -31600424.45 -31600424.38 0.0060 0.0056

Mercury -91231-12-30 02:23 J -31600336.49 -31600336.40 -31600336.27 0.0060 0.0050

Mercury -91230-03-28 04:18 J -31600248.45 -31600248.32 -31600248.18 0.0060 0.0043

Mercury -91230-06-24 05:15 J -31600160.41 -31600160.28 -31600160.10 0.0060 0.0038

Mercury -91230-09-20 07:11 J -31600072.37 -31600072.20 -31600072.03 0.0060 0.0030

Mercury -91230-12-17 08:23 J -31599984.32 -31599984.15 -31599983.96 0.0060 0.0024

Mercury -91229-03-14 10:03 J -31599896.26 -31599896.08 -31599895.89 0.0060 0.0017

Mercury -91229-06-10 11:15 J -31599808.21 -31599808.03 -31599807.82 0.0060 0.0012

Mercury -91229-09-06 12:56 J -31599720.15 -31599719.96 -31599719.76 0.0060 0.0005

Mercury -91229-12-03 14:37 J -31599632.09 -31599631.89 -31599631.70 0.0060 0.0003

Mercury -91228-03-01 15:49 J -31599544.02 -31599543.84 -31599543.64 0.0061 0.0010

Mercury -91228-05-28 17:30 J -31599455.96 -31599455.77 -31599455.58 0.0061 0.0016

Mercury -91228-08-24 18:56 J -31599367.89 -31599367.71 -31599367.52 0.0061 0.0023

Mercury -91228-11-20 20:08 J -31599279.81 -31599279.66 -31599279.47 0.0061 0.0030

Mercury -91227-02-16 21:35 J -31599191.74 -31599191.60 -31599191.42 0.0061 0.0037

Mercury -91227-05-15 23:30 J -31599103.65 -31599103.52 -31599103.38 0.0061 0.0043

Mercury -91227-08-12 00:56 J -31599015.56 -31599015.46 -31599015.34 0.0061 0.0050

Mercury -91227-11-08 02:08 J -31598927.46 -31598927.41 -31598927.32 0.0061 0.0057

Venus -91223-05-20 00:13 J -31597638.61 -31597638.49 -31597638.30 0.0062 0.0046



Venus -91223-12-31 04:47 J -31597413.51 -31597413.30 -31597413.06 0.0062 0.0015

Venus -91222-08-13 09:06 J -31597188.33 -31597188.12 -31597187.89 0.0062 0.0018

Venus -91221-03-25 13:11 J -31596963.07 -31596962.95 -31596962.79 0.0063 0.0050

Mars -91212-08-02 18:13 J -31593545.98 -31593545.74 -31593545.43 0.0066 0.0036

Earth -91211-05-27 01:54 J -31593248.50 -31593248.42 -31593248.28 0.0066 0.0061

Moon -91211-05-27 05:44 J -31593248.34 -31593248.26 -31593248.15 0.0066 0.0062 \*

Moon -91210-05-28 16:47 J -31592882.01 -31592881.80 -31592881.56 0.0067 0.0035

Earth -91210-05-28 18:56 J -31592881.92 -31592881.71 -31592881.46 0.0067 0.0033 \*

Mercury -91137-07-27 19:54 J -31566157.73 -31566157.67 -31566157.61 0.0084 0.0075

Mercury -91137-10-23 21:06 J -31566069.70 -31566069.62 -31566069.53 0.0084 0.0062

Mercury -91136-01-19 22:18 J -31565981.67 -31565981.57 -31565981.45 0.0084 0.0050

Mercury -91136-04-17 23:44 J -31565893.63 -31565893.51 -31565893.39 0.0084 0.0038

Mercury -91136-07-15 00:56 J -31565805.58 -31565805.46 -31565805.33 0.0084 0.0025

Mercury -91136-10-11 02:23 J -31565717.53 -31565717.40 -31565717.27 0.0084 0.0013

Mercury -91135-01-07 03:35 J -31565629.48 -31565629.35 -31565629.22 0.0084 0.0001

Mercury -91135-04-05 04:47 J -31565541.43 -31565541.30 -31565541.17 0.0084 0.0011

Mercury -91135-07-02 05:59 J -31565453.37 -31565453.25 -31565453.12 0.0083 0.0023

Mercury -91135-09-28 07:11 J -31565365.32 -31565365.20 -31565365.08 0.0083 0.0035

Mercury -91135-12-25 08:08 J -31565277.25 -31565277.16 -31565277.04 0.0083 0.0048

Mercury -91134-03-23 09:35 J -31565189.19 -31565189.10 -31565189.00 0.0083 0.0058

Mercury -91134-06-19 10:47 J -31565101.11 -31565101.05 -31565100.98 0.0083 0.0070

Mercury -91134-09-15 11:44 J -31565013.01 -31565013.01 -31565012.97 0.0083 0.0082

Venus -91132-02-16 12:56 J -31564493.11 -31564492.96 -31564492.78 0.0082 0.0051

Venus -91132-09-29 23:44 J -31564267.72 -31564267.51 -31564267.30 0.0082 0.0018

Earth -91125-11-29 17:01 J -31561649.96 -31561649.79 -31561649.59 0.0078 0.0052

Moon -91125-11-29 20:23 J -31561649.82 -31561649.65 -31561649.45 0.0078 0.0054 \*

# 91ST MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 91st millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-90983-10-29 08:23 J	-31509816.21	-31509816.15	-31509816.06	0.0060	0.0055		
Mercury	-90982-01-25 09:35 J	-31509728.19	-31509728.10	-31509727.96	0.0060	0.0049		
Mercury	-90982-04-23 11:30 J	-31509640.15	-31509640.02	-31509639.88	0.0060	0.0042		
Mercury	-90982-07-20 12:42 J	-31509552.11	-31509551.97	-31509551.80	0.0060	0.0036		
Mercury	-90982-10-16 14:23 J	-31509464.07	-31509463.90	-31509463.72	0.0060	0.0029		
Mercury	-90981-01-12 15:35 J	-31509376.01	-31509375.85	-31509375.65	0.0060	0.0023		
Mercury	-90981-04-09 17:15 J	-31509287.96	-31509287.78	-31509287.58	0.0060	0.0016		
Mercury	-90981-07-06 18:56 J	-31509199.90	-31509199.71	-31509199.52	0.0060	0.0010		
Mercury	-90981-10-02 20:23 J	-31509111.85	-31509111.65	-31509111.45	0.0060	0.0003		
Mercury	-90981-12-29 21:49 J	-31509023.78	-31509023.59	-31509023.39	0.0060	0.0004		
Mercury	-90980-03-27 23:15 J	-31508935.72	-31508935.53	-31508935.33	0.0061	0.0010		
Mercury	-90980-06-24 00:42 J	-31508847.65	-31508847.47	-31508847.27	0.0061	0.0017		
Mercury	-90980-09-20 02:08 J	-31508759.58	-31508759.41	-31508759.22	0.0061	0.0024		
Mercury	-90980-12-17 03:20 J	-31508671.51	-31508671.36	-31508671.17	0.0061	0.0031		
Mercury	-90979-03-15 04:47 J	-31508583.43	-31508583.30	-31508583.12	0.0061	0.0038		
Mercury	-90979-06-11 06:42 J	-31508495.35	-31508495.22	-31508495.08	0.0061	0.0044		
Mercury	-90979-09-07 08:08 J	-31508407.25	-31508407.16	-31508407.04	0.0061	0.0051		
Mercury	-90979-12-04 09:35 J	-31508319.14	-31508319.10	-31508319.03	0.0061	0.0058		
Venus	-90975-04-22 08:08 J	-31507084.26	-31507084.16	-31507084.02	0.0062	0.0052		
Venus	-90975-12-03 12:13 J	-31506859.18	-31506858.99	-31506858.76	0.0062	0.0022		
Venus	-90974-07-16 16:47 J	-31506634.02	-31506633.80	-31506633.57	0.0062	0.0011		
Venus	-90973-02-26 20:51 J	-31506408.78	-31506408.63	-31506408.45	0.0063	0.0043		

Mars -90964-11-10 19:11 J -31502863.85 -31502863.70 -31502863.51 0.0066 0.0057  
 Moon -90963-05-28 11:44 J -31502665.04 -31502665.01 -31502664.93 0.0066 0.0065  
 Earth -90963-05-28 14:08 J -31502664.98 -31502664.91 -31502664.77 0.0066 0.0062 \*  
 Earth -90962-05-30 07:11 J -31502298.42 -31502298.20 -31502297.95 0.0067 0.0032  
 Moon -90962-05-30 07:25 J -31502298.40 -31502298.19 -31502297.93 0.0067 0.0035 \*  
 Mercury -90889-05-27 03:49 J -31475637.35 -31475637.34 -31475637.32 0.0085 0.0084  
 Mercury -90889-08-23 05:01 J -31475549.35 -31475549.29 -31475549.21 0.0084 0.0071  
 Mercury -90889-11-19 06:27 J -31475461.32 -31475461.23 -31475461.13 0.0084 0.0059  
 Mercury -90888-02-15 07:39 J -31475373.28 -31475373.18 -31475373.06 0.0084 0.0046  
 Mercury -90888-05-14 08:51 J -31475285.24 -31475285.13 -31475285.00 0.0084 0.0034  
 Mercury -90888-08-10 10:18 J -31475197.19 -31475197.07 -31475196.94 0.0084 0.0022  
 Mercury -90888-11-06 11:30 J -31475109.15 -31475109.02 -31475108.88 0.0084 0.0010  
 Mercury -90887-02-02 12:56 J -31475021.09 -31475020.96 -31475020.83 0.0084 0.0003  
 Mercury -90887-05-01 14:08 J -31474933.04 -31474932.91 -31474932.78 0.0084 0.0015  
 Mercury -90887-07-28 15:20 J -31474844.99 -31474844.86 -31474844.73 0.0083 0.0027  
 Mercury -90887-10-24 16:32 J -31474756.93 -31474756.81 -31474756.69 0.0083 0.0038  
 Mercury -90886-01-20 17:44 J -31474668.86 -31474668.76 -31474668.65 0.0083 0.0050  
 Mercury -90886-04-18 18:42 J -31474580.79 -31474580.72 -31474580.62 0.0083 0.0062  
 Mercury -90886-07-15 19:54 J -31474492.72 -31474492.67 -31474492.60 0.0083 0.0074  
 Venus -90884-01-19 21:06 J -31473938.75 -31473938.62 -31473938.46 0.0082 0.0060  
 Venus -90884-09-02 07:54 J -31473713.38 -31473713.17 -31473712.95 0.0082 0.0008  
 Venus -90883-04-15 17:30 J -31473487.82 -31473487.77 -31473487.66 0.0081 0.0076  
 Moon -90877-12-01 05:01 J -31471066.47 -31471066.29 -31471066.08 0.0078 0.0047  
 Earth -90877-12-01 07:54 J -31471066.35 -31471066.17 -31471065.96 0.0078 0.0049 \*  
 Mercury -90735-08-28 15:06 J -31419295.90 -31419295.87 -31419295.78 0.0060 0.0057  
 Mercury -90735-11-24 17:01 J -31419207.89 -31419207.79 -31419207.68 0.0060 0.0050  
 Mercury -90734-02-20 18:13 J -31419119.85 -31419119.74 -31419119.59 0.0060 0.0044  
 Mercury -90734-05-19 20:08 J -31419031.81 -31419031.66 -31419031.51 0.0060 0.0037  
 Mercury -90734-08-15 21:06 J -31418943.77 -31418943.62 -31418943.43 0.0060 0.0032  
 Mercury -90734-11-11 23:01 J -31418855.72 -31418855.54 -31418855.36 0.0060 0.0025

Mercury -90733-02-08 00:13 J -31418767.66 -31418767.49 -31418767.29 0.0060 0.0018

Mercury -90733-05-06 01:54 J -31418679.61 -31418679.42 -31418679.22 0.0060 0.0011

Mercury -90733-08-02 03:20 J -31418591.55 -31418591.36 -31418591.16 0.0060 0.0005

Mercury -90733-10-29 05:01 J -31418503.49 -31418503.29 -31418503.10 0.0060 0.0002

Mercury -90732-01-25 06:27 J -31418415.42 -31418415.23 -31418415.04 0.0061 0.0009

Mercury -90732-04-23 07:39 J -31418327.36 -31418327.18 -31418326.98 0.0061 0.0016

Mercury -90732-07-20 09:20 J -31418239.29 -31418239.11 -31418238.92 0.0061 0.0022

Mercury -90732-10-16 10:47 J -31418151.21 -31418151.05 -31418150.87 0.0061 0.0029

Mercury -90731-01-12 11:59 J -31418063.14 -31418063.00 -31418062.82 0.0061 0.0036

Mercury -90731-04-10 13:25 J -31417975.06 -31417974.94 -31417974.78 0.0061 0.0043

Mercury -90731-07-07 15:20 J -31417886.97 -31417886.86 -31417886.74 0.0061 0.0049

Mercury -90731-10-03 16:47 J -31417798.86 -31417798.80 -31417798.71 0.0061 0.0056

Venus -90727-03-25 19:11 J -31416529.83 -31416529.70 -31416529.58 0.0062 0.0052

Venus -90727-11-05 23:01 J -31416304.75 -31416304.54 -31416304.32 0.0062 0.0021

Venus -90726-06-19 03:06 J -31416079.58 -31416079.37 -31416079.14 0.0062 0.0011

Venus -90725-01-30 07:11 J -31415854.35 -31415854.20 -31415854.02 0.0063 0.0043

Earth -90715-05-30 07:11 J -31412081.35 -31412081.20 -31412080.99 0.0066 0.0050

Moon -90715-05-30 08:37 J -31412081.30 -31412081.14 -31412080.93 0.0066 0.0049 \*

Earth -90714-05-31 23:59 J -31411714.67 -31411714.50 -31411714.28 0.0067 0.0045

Moon -90714-05-31 23:59 J -31411714.66 -31411714.50 -31411714.27 0.0067 0.0045 \*

Mercury -90641-06-22 13:54 J -31385028.97 -31385028.92 -31385028.85 0.0085 0.0075

Mercury -90641-09-18 15:35 J -31384940.94 -31384940.85 -31384940.77 0.0084 0.0062

Mercury -90641-12-15 16:32 J -31384852.91 -31384852.81 -31384852.69 0.0084 0.0050

Mercury -90640-03-13 17:59 J -31384764.87 -31384764.75 -31384764.63 0.0084 0.0037

Mercury -90640-06-09 19:11 J -31384676.82 -31384676.70 -31384676.57 0.0084 0.0025

Mercury -90640-09-05 20:23 J -31384588.77 -31384588.65 -31384588.51 0.0084 0.0013

Mercury -90640-12-02 21:49 J -31384500.72 -31384500.59 -31384500.46 0.0084 0.0001

Mercury -90639-02-28 23:01 J -31384412.67 -31384412.54 -31384412.41 0.0084 0.0011

Mercury -90639-05-28 00:13 J -31384324.62 -31384324.49 -31384324.36 0.0083 0.0023

Mercury -90639-08-24 01:25 J -31384236.56 -31384236.44 -31384236.32 0.0083 0.0035

Mercury -90639-11-20 02:23 J -31384148.50 -31384148.40 -31384148.28 0.0083 0.0048  
 Mercury -90638-02-16 03:35 J -31384060.43 -31384060.35 -31384060.24 0.0083 0.0059  
 Mercury -90638-05-15 05:01 J -31383972.35 -31383972.29 -31383972.22 0.0083 0.0070  
 Mercury -90638-08-11 05:59 J -31383884.25 -31383884.25 -31383884.22 0.0083 0.0082  
 Venus -90637-12-23 07:39 J -31383384.31 -31383384.18 -31383384.01 0.0082 0.0059  
 Venus -90636-08-05 18:27 J -31383158.93 -31383158.73 -31383158.51 0.0082 0.0010  
 Venus -90635-03-19 04:18 J -31382933.37 -31382933.32 -31382933.22 0.0081 0.0077  
 Earth -90629-12-03 02:37 J -31380482.60 -31380482.39 -31380482.15 0.0078 0.0033  
 Moon -90629-12-03 05:01 J -31380482.51 -31380482.29 -31380482.03 0.0078 0.0029 \*  
 Mercury -90487-06-27 22:47 J -31328775.58 -31328775.55 -31328775.46 0.0060 0.0057  
 Mercury -90487-09-24 00:42 J -31328687.57 -31328687.47 -31328687.35 0.0060 0.0050  
 Mercury -90487-12-21 01:54 J -31328599.53 -31328599.42 -31328599.27 0.0060 0.0044  
 Mercury -90486-03-19 03:35 J -31328511.49 -31328511.35 -31328511.19 0.0060 0.0038  
 Mercury -90486-06-15 04:47 J -31328423.45 -31328423.30 -31328423.11 0.0060 0.0032  
 Mercury -90486-09-11 06:27 J -31328335.40 -31328335.23 -31328335.04 0.0060 0.0025  
 Mercury -90486-12-08 07:54 J -31328247.34 -31328247.17 -31328246.97 0.0060 0.0018  
 Mercury -90485-03-05 09:35 J -31328159.29 -31328159.10 -31328158.90 0.0060 0.0011  
 Mercury -90485-06-01 11:15 J -31328071.23 -31328071.03 -31328070.84 0.0060 0.0005  
 Mercury -90485-08-28 12:42 J -31327983.17 -31327982.97 -31327982.77 0.0061 0.0002  
 Mercury -90485-11-24 14:08 J -31327895.10 -31327894.91 -31327894.71 0.0061 0.0009  
 Mercury -90484-02-20 15:20 J -31327807.04 -31327806.86 -31327806.66 0.0061 0.0016  
 Mercury -90484-05-19 17:01 J -31327718.97 -31327718.79 -31327718.60 0.0061 0.0022  
 Mercury -90484-08-15 18:27 J -31327630.89 -31327630.73 -31327630.55 0.0061 0.0029  
 Mercury -90484-11-11 19:39 J -31327542.82 -31327542.68 -31327542.50 0.0061 0.0036  
 Mercury -90483-02-07 21:06 J -31327454.73 -31327454.62 -31327454.45 0.0061 0.0043  
 Mercury -90483-05-06 23:01 J -31327366.64 -31327366.54 -31327366.42 0.0061 0.0049  
 Mercury -90483-08-03 00:27 J -31327278.54 -31327278.48 -31327278.39 0.0061 0.0056  
 Venus -90479-02-26 06:13 J -31325975.36 -31325975.24 -31325975.08 0.0062 0.0048  
 Venus -90479-10-09 10:18 J -31325750.27 -31325750.07 -31325749.83 0.0062 0.0018  
 Venus -90478-05-22 14:37 J -31325525.10 -31325524.89 -31325524.66 0.0063 0.0015

Venus -90477-01-02 18:13 J -31325299.86 -31325299.74 -31325299.55 0.0063 0.0047  
 Moon -90467-06-01 02:08 J -31321497.62 -31321497.41 -31321497.15 0.0067 0.0028  
 Earth -90467-06-01 03:06 J -31321497.60 -31321497.37 -31321497.12 0.0067 0.0030 \*  
 Moon -90466-06-02 18:13 J -31321130.83 -31321130.74 -31321130.61 0.0067 0.0061  
 Earth -90466-06-02 19:11 J -31321130.73 -31321130.70 -31321130.60 0.0067 0.0065 \*  
 Mercury -90393-01-24 22:32 J -31294596.56 -31294596.56 -31294596.55 0.0085 0.0084  
 Mercury -90393-04-21 23:59 J -31294508.57 -31294508.50 -31294508.43 0.0084 0.0072  
 Mercury -90393-07-19 00:56 J -31294420.54 -31294420.46 -31294420.35 0.0084 0.0060  
 Mercury -90393-10-15 02:23 J -31294332.50 -31294332.40 -31294332.28 0.0084 0.0047  
 Mercury -90392-01-11 03:35 J -31294244.46 -31294244.35 -31294244.22 0.0084 0.0035  
 Mercury -90392-04-09 05:01 J -31294156.42 -31294156.29 -31294156.16 0.0084 0.0023  
 Mercury -90392-07-06 06:13 J -31294068.37 -31294068.24 -31294068.10 0.0084 0.0011  
 Mercury -90392-10-02 07:39 J -31293980.32 -31293980.18 -31293980.05 0.0084 0.0003  
 Mercury -90392-12-29 08:51 J -31293892.26 -31293892.13 -31293892.00 0.0084 0.0014  
 Mercury -90391-03-27 10:03 J -31293804.21 -31293804.08 -31293803.95 0.0083 0.0026  
 Mercury -90391-06-23 11:15 J -31293716.15 -31293716.03 -31293715.91 0.0083 0.0037  
 Mercury -90391-09-19 12:13 J -31293628.08 -31293627.99 -31293627.87 0.0083 0.0050  
 Mercury -90391-12-16 13:25 J -31293540.02 -31293539.94 -31293539.84 0.0083 0.0061  
 Mercury -90390-03-14 14:51 J -31293451.94 -31293451.88 -31293451.82 0.0083 0.0072  
 Venus -90389-11-25 22:03 J -31292829.74 -31292829.58 -31292829.39 0.0082 0.0045  
 Venus -90388-07-09 08:23 J -31292604.34 -31292604.15 -31292603.93 0.0082 0.0023  
 Mars -90382-11-14 12:56 J -31290285.26 -31290284.96 -31290284.65 0.0078 0.0007  
 Moon -90381-12-05 01:25 J -31289898.68 -31289898.44 -31289898.20 0.0078 0.0001  
 Earth -90381-12-05 02:37 J -31289898.64 -31289898.39 -31289898.14 0.0078 0.0001 \*  
 Mercury -90239-01-29 06:27 J -31238343.24 -31238343.23 -31238343.18 0.0060 0.0059  
 Mercury -90239-04-27 07:54 J -31238255.24 -31238255.17 -31238255.05 0.0060 0.0053  
 Mercury -90239-07-24 09:35 J -31238167.21 -31238167.10 -31238166.96 0.0060 0.0046  
 Mercury -90239-10-20 10:47 J -31238079.17 -31238079.05 -31238078.88 0.0060 0.0040  
 Mercury -90238-01-16 12:27 J -31237991.13 -31237990.98 -31237990.80 0.0060 0.0034  
 Mercury -90238-04-14 13:54 J -31237903.08 -31237902.92 -31237902.73 0.0060 0.0027

Mercury -90238-07-11 15:35 J -31237815.03 -31237814.85 -31237814.66 0.0060 0.0020  
 Mercury -90238-10-07 17:15 J -31237726.97 -31237726.78 -31237726.59 0.0060 0.0014  
 Mercury -90237-01-03 18:27 J -31237638.91 -31237638.73 -31237638.52 0.0060 0.0008  
 Mercury -90237-03-31 20:08 J -31237550.85 -31237550.66 -31237550.46 0.0061 0.0001  
 Mercury -90237-06-27 21:35 J -31237462.79 -31237462.60 -31237462.40 0.0061 0.0006  
 Mercury -90237-09-23 23:01 J -31237374.72 -31237374.54 -31237374.34 0.0061 0.0013  
 Mercury -90237-12-21 00:27 J -31237286.66 -31237286.48 -31237286.28 0.0061 0.0020  
 Mercury -90236-03-19 02:08 J -31237198.58 -31237198.41 -31237198.23 0.0061 0.0026  
 Mercury -90236-06-15 03:35 J -31237110.51 -31237110.35 -31237110.18 0.0061 0.0033  
 Mercury -90236-09-11 04:47 J -31237022.43 -31237022.30 -31237022.13 0.0061 0.0040  
 Mercury -90236-12-08 06:13 J -31236934.34 -31236934.24 -31236934.09 0.0061 0.0047  
 Mercury -90235-03-06 07:39 J -31236846.24 -31236846.18 -31236846.06 0.0061 0.0054  
 Mercury -90235-06-02 09:35 J -31236758.11 -31236758.10 -31236758.06 0.0061 0.0061  
 Venus -90231-01-29 20:23 J -31235420.81 -31235420.65 -31235420.45 0.0062 0.0038  
 Venus -90231-09-12 00:42 J -31235195.68 -31235195.47 -31235195.23 0.0062 0.0007  
 Venus -90230-04-25 04:47 J -31234970.49 -31234970.30 -31234970.08 0.0063 0.0026  
 Venus -90230-12-06 08:37 J -31234745.20 -31234745.14 -31234745.02 0.0063 0.0058  
 Mars -90221-10-16 14:37 J -31231508.15 -31231507.89 -31231507.59 0.0066 0.0034  
 Moon -90219-06-03 03:49 J -31230913.61 -31230913.34 -31230913.06 0.0067 0.0006  
 Earth -90219-06-03 04:03 J -31230913.59 -31230913.33 -31230913.05 0.0067 0.0004 \*  
 Mercury -90146-11-24 09:06 J -31204076.16 -31204076.12 -31204076.05 0.0085 0.0077  
 Mercury -90145-02-20 10:47 J -31203988.14 -31203988.05 -31203987.97 0.0084 0.0064  
 Mercury -90145-05-18 11:59 J -31203900.10 -31203900.00 -31203899.90 0.0084 0.0051  
 Mercury -90145-08-14 13:11 J -31203812.06 -31203811.95 -31203811.83 0.0084 0.0039  
 Mercury -90145-11-10 14:23 J -31203724.02 -31203723.90 -31203723.77 0.0084 0.0027  
 Mercury -90144-02-06 15:49 J -31203635.97 -31203635.84 -31203635.71 0.0084 0.0015  
 Mercury -90144-05-05 17:01 J -31203547.92 -31203547.79 -31203547.66 0.0084 0.0003  
 Mercury -90144-08-01 18:13 J -31203459.87 -31203459.74 -31203459.61 0.0084 0.0009  
 Mercury -90144-10-28 19:25 J -31203371.81 -31203371.69 -31203371.56 0.0084 0.0021  
 Mercury -90143-01-24 20:37 J -31203283.76 -31203283.64 -31203283.51 0.0083 0.0033

Mercury -90143-04-22 21:49 J -31203195.70 -31203195.59 -31203195.47 0.0083 0.0045

Mercury -90143-07-19 23:01 J -31203107.63 -31203107.54 -31203107.44 0.0083 0.0056

Mercury -90143-10-16 00:13 J -31203019.56 -31203019.49 -31203019.41 0.0083 0.0068

Mercury -90142-01-12 01:39 J -31202931.47 -31202931.43 -31202931.40 0.0083 0.0079

Venus -90141-10-29 15:35 J -31202275.06 -31202274.85 -31202274.64 0.0082 0.0020

Venus -90140-06-12 01:25 J -31202049.60 -31202049.44 -31202049.25 0.0082 0.0047

Earth -90133-12-07 05:59 J -31199314.44 -31199314.25 -31199314.04 0.0077 0.0048

Moon -90133-12-07 06:42 J -31199314.41 -31199314.22 -31199313.99 0.0077 0.0045 \*

# 90TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 90th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-89992-09-01 14:51 J	-31147910.89	-31147910.88	-31147910.83	0.0060	0.0059		
Mercury	-89992-11-28 16:03 J	-31147822.89	-31147822.83	-31147822.71	0.0060	0.0054		
Mercury	-89991-02-24 17:59 J	-31147734.86	-31147734.75	-31147734.62	0.0060	0.0046		
Mercury	-89991-05-23 19:11 J	-31147646.83	-31147646.70	-31147646.53	0.0060	0.0040		
Mercury	-89991-08-19 20:51 J	-31147558.78	-31147558.63	-31147558.46	0.0060	0.0034		
Mercury	-89991-11-15 22:18 J	-31147470.73	-31147470.57	-31147470.38	0.0060	0.0027		
Mercury	-89990-02-11 23:59 J	-31147382.68	-31147382.50	-31147382.31	0.0060	0.0021		
Mercury	-89990-05-11 01:11 J	-31147294.63	-31147294.45	-31147294.24	0.0060	0.0015		
Mercury	-89990-08-07 02:51 J	-31147206.57	-31147206.38	-31147206.18	0.0060	0.0008		
Mercury	-89990-11-03 04:32 J	-31147118.51	-31147118.31	-31147118.11	0.0061	0.0001		



Mercury -89989-01-30 05:59 J -31147030.44 -31147030.25 -31147030.05 0.0061 0.0006  
 Mercury -89989-04-27 07:25 J -31146942.38 -31146942.19 -31146941.99 0.0061 0.0013  
 Mercury -89989-07-24 08:37 J -31146854.31 -31146854.14 -31146853.94 0.0061 0.0020  
 Mercury -89989-10-20 10:18 J -31146766.24 -31146766.07 -31146765.88 0.0061 0.0026  
 Mercury -89988-01-16 11:44 J -31146678.16 -31146678.01 -31146677.83 0.0061 0.0033  
 Mercury -89988-04-14 12:56 J -31146590.08 -31146589.96 -31146589.78 0.0061 0.0040  
 Mercury -89988-07-11 15:06 J -31146502.00 -31146501.87 -31146501.74 0.0061 0.0046  
 Mercury -89988-10-07 16:18 J -31146413.90 -31146413.82 -31146413.71 0.0061 0.0053  
 Mercury -89987-01-03 17:44 J -31146325.77 -31146325.76 -31146325.71 0.0061 0.0060  
 Venus -89984-05-22 08:08 J -31145091.25 -31145091.16 -31145091.03 0.0062 0.0054  
 Venus -89983-01-02 12:27 J -31144866.18 -31144865.98 -31144865.76 0.0062 0.0023  
 Venus -89983-08-15 16:47 J -31144641.02 -31144640.80 -31144640.57 0.0063 0.0009  
 Venus -89982-03-28 20:37 J -31144415.79 -31144415.64 -31144415.44 0.0063 0.0041  
 Mars -89972-01-25 17:01 J -31140825.01 -31140824.79 -31140824.56 0.0066 0.0048  
 Earth -89972-06-03 14:08 J -31140696.05 -31140695.91 -31140695.69 0.0067 0.0050  
 Moon -89972-06-03 15:49 J -31140696.03 -31140695.84 -31140695.65 0.0067 0.0048 \*  
 Earth -89971-06-05 06:56 J -31140329.38 -31140329.21 -31140328.99 0.0067 0.0046  
 Moon -89971-06-05 08:51 J -31140329.31 -31140329.13 -31140328.92 0.0067 0.0044 \*  
 Mercury -89898-06-27 19:39 J -31113643.73 -31113643.68 -31113643.61 0.0085 0.0074  
 Mercury -89898-09-23 21:06 J -31113555.71 -31113555.62 -31113555.53 0.0084 0.0061  
 Mercury -89898-12-20 22:18 J -31113467.67 -31113467.57 -31113467.46 0.0084 0.0049  
 Mercury -89897-03-17 23:30 J -31113379.63 -31113379.52 -31113379.39 0.0084 0.0037  
 Mercury -89897-06-14 00:56 J -31113291.58 -31113291.46 -31113291.33 0.0084 0.0025  
 Mercury -89897-09-10 02:08 J -31113203.54 -31113203.41 -31113203.27 0.0084 0.0013  
 Mercury -89897-12-07 03:35 J -31113115.48 -31113115.35 -31113115.22 0.0084 0.0001  
 Mercury -89896-03-05 04:47 J -31113027.43 -31113027.30 -31113027.17 0.0084 0.0011  
 Mercury -89896-06-01 05:59 J -31112939.38 -31112939.25 -31112939.12 0.0084 0.0023  
 Mercury -89896-08-28 06:56 J -31112851.32 -31112851.21 -31112851.08 0.0083 0.0036  
 Mercury -89896-11-24 08:08 J -31112763.26 -31112763.16 -31112763.04 0.0083 0.0047  
 Mercury -89895-02-20 09:35 J -31112675.19 -31112675.10 -31112675.00 0.0083 0.0058

Mercury -89895-05-19 10:32 J -31112587.11 -31112587.06 -31112586.98 0.0083 0.0070

Mercury -89895-08-15 11:44 J -31112499.02 -31112499.01 -31112498.97 0.0083 0.0082

Venus -89893-02-20 01:39 J -31111945.59 -31111945.43 -31111945.24 0.0082 0.0049

Venus -89893-10-02 12:13 J -31111720.19 -31111719.99 -31111719.77 0.0082 0.0019

Earth -89886-12-08 16:18 J -31109097.05 -31109096.82 -31109096.58 0.0078 0.0025

Moon -89886-12-08 17:59 J -31109096.99 -31109096.75 -31109096.49 0.0078 0.0022 \*

Mercury -89744-04-05 00:27 J -31057478.53 -31057478.48 -31057478.39 0.0060 0.0056

Mercury -89744-07-02 02:08 J -31057390.51 -31057390.41 -31057390.29 0.0060 0.0050

Mercury -89744-09-28 03:20 J -31057302.48 -31057302.36 -31057302.21 0.0060 0.0043

Mercury -89744-12-25 05:15 J -31057214.44 -31057214.28 -31057214.13 0.0060 0.0037

Mercury -89743-03-23 06:27 J -31057126.39 -31057126.23 -31057126.05 0.0060 0.0030

Mercury -89743-06-19 08:08 J -31057038.34 -31057038.16 -31057037.98 0.0060 0.0024

Mercury -89743-09-15 09:20 J -31056950.29 -31056950.11 -31056949.91 0.0060 0.0018

Mercury -89743-12-12 11:01 J -31056862.23 -31056862.04 -31056861.84 0.0060 0.0011

Mercury -89742-03-10 12:27 J -31056774.17 -31056773.98 -31056773.78 0.0061 0.0004

Mercury -89742-06-06 14:08 J -31056686.11 -31056685.91 -31056685.72 0.0061 0.0003

Mercury -89742-09-02 15:20 J -31056598.05 -31056597.86 -31056597.66 0.0061 0.0010

Mercury -89742-11-29 17:01 J -31056509.98 -31056509.79 -31056509.60 0.0061 0.0016

Mercury -89741-02-25 18:13 J -31056421.91 -31056421.74 -31056421.54 0.0061 0.0023

Mercury -89741-05-23 19:39 J -31056333.83 -31056333.68 -31056333.49 0.0061 0.0030

Mercury -89741-08-19 21:20 J -31056245.76 -31056245.61 -31056245.44 0.0061 0.0036

Mercury -89741-11-15 22:47 J -31056157.67 -31056157.55 -31056157.40 0.0061 0.0043

Mercury -89740-02-12 00:13 J -31056069.58 -31056069.49 -31056069.36 0.0061 0.0050

Mercury -89740-05-11 01:39 J -31055981.48 -31055981.43 -31055981.34 0.0061 0.0057

Venus -89736-04-25 02:23 J -31054536.58 -31054536.40 -31054536.19 0.0062 0.0032

Venus -89736-12-06 06:56 J -31054311.44 -31054311.21 -31054310.98 0.0063 0.0001

Venus -89735-07-19 10:47 J -31054086.23 -31054086.05 -31054085.84 0.0063 0.0031

Venus -89734-03-01 15:06 J -31053860.87 -31053860.87 -31053860.83 0.0063 0.0063

Earth -89724-06-05 23:01 J -31050111.80 -31050111.54 -31050111.26 0.0067 0.0005

Moon -89724-06-05 23:44 J -31050111.77 -31050111.51 -31050111.25 0.0067 0.0008 \*

Mercury -89651-11-02 05:30 J -31023299.30 -31023299.27 -31023299.21 0.0085 0.0080

Mercury -89650-01-29 06:56 J -31023211.28 -31023211.21 -31023211.12 0.0084 0.0067

Mercury -89650-04-27 08:23 J -31023123.25 -31023123.15 -31023123.05 0.0084 0.0054

Mercury -89650-07-24 09:35 J -31023035.21 -31023035.10 -31023034.98 0.0084 0.0042

Mercury -89650-10-20 10:47 J -31022947.16 -31022947.05 -31022946.92 0.0084 0.0031

Mercury -89649-01-16 12:13 J -31022859.12 -31022858.99 -31022858.86 0.0084 0.0018

Mercury -89649-04-13 13:25 J -31022771.07 -31022770.94 -31022770.80 0.0084 0.0007

Mercury -89649-07-10 14:51 J -31022683.01 -31022682.88 -31022682.75 0.0084 0.0006

Mercury -89649-10-06 16:03 J -31022594.96 -31022594.83 -31022594.70 0.0084 0.0018

Mercury -89648-01-02 17:15 J -31022506.90 -31022506.78 -31022506.65 0.0083 0.0030

Mercury -89648-03-31 18:27 J -31022418.84 -31022418.73 -31022418.61 0.0083 0.0042

Mercury -89648-06-27 19:39 J -31022330.78 -31022330.68 -31022330.58 0.0083 0.0053

Mercury -89648-09-23 20:37 J -31022242.71 -31022242.64 -31022242.54 0.0083 0.0065

Mercury -89648-12-20 22:03 J -31022154.63 -31022154.58 -31022154.53 0.0083 0.0076

Venus -89646-06-12 15:06 J -31021615.98 -31021615.87 -31021615.74 0.0082 0.0068

Venus -89645-01-24 01:39 J -31021390.64 -31021390.43 -31021390.21 0.0082 0.0001

Venus -89645-09-05 11:44 J -31021165.12 -31021165.01 -31021164.87 0.0081 0.0066

Mars -89639-10-22 12:42 J -31018927.26 -31018926.97 -31018926.66 0.0078 0.0011

Moon -89638-12-11 03:35 J -31018512.51 -31018512.35 -31018512.16 0.0077 0.0054

Earth -89638-12-11 04:47 J -31018512.47 -31018512.30 -31018512.11 0.0077 0.0054 \*

Mercury -89497-08-10 09:06 J -30967134.16 -30967134.12 -30967134.04 0.0060 0.0057

Mercury -89497-11-06 10:18 J -30967046.14 -30967046.07 -30967045.94 0.0060 0.0052

Mercury -89496-02-02 12:13 J -30966958.11 -30966957.99 -30966957.85 0.0060 0.0044

Mercury -89496-05-01 13:25 J -30966870.07 -30966869.94 -30966869.77 0.0060 0.0038

Mercury -89496-07-28 15:06 J -30966782.03 -30966781.87 -30966781.69 0.0060 0.0032

Mercury -89496-10-24 16:18 J -30966693.98 -30966693.82 -30966693.62 0.0060 0.0026

Mercury -89495-01-20 17:59 J -30966605.92 -30966605.75 -30966605.55 0.0060 0.0019

Mercury -89495-04-18 19:39 J -30966517.87 -30966517.68 -30966517.48 0.0060 0.0012

Mercury -89495-07-15 21:06 J -30966429.81 -30966429.62 -30966429.42 0.0061 0.0005

Mercury -89495-10-11 22:47 J -30966341.75 -30966341.55 -30966341.36 0.0061 0.0002

Mercury -89494-01-08 00:13 J -30966253.69 -30966253.49 -30966253.30 0.0061 0.0008

Mercury -89494-04-06 01:25 J -30966165.62 -30966165.44 -30966165.24 0.0061 0.0015

Mercury -89494-07-03 02:51 J -30966077.55 -30966077.38 -30966077.18 0.0061 0.0022

Mercury -89494-09-29 04:32 J -30965989.48 -30965989.31 -30965989.13 0.0061 0.0028

Mercury -89494-12-26 05:44 J -30965901.40 -30965901.26 -30965901.08 0.0061 0.0035

Mercury -89493-03-23 07:11 J -30965813.32 -30965813.20 -30965813.03 0.0061 0.0042

Mercury -89493-06-19 09:20 J -30965725.23 -30965725.11 -30965725.00 0.0061 0.0049

Mercury -89493-09-15 10:32 J -30965637.13 -30965637.06 -30965636.97 0.0061 0.0056

Venus -89489-08-15 17:30 J -30964206.93 -30964206.77 -30964206.57 0.0062 0.0039

Venus -89488-03-28 22:18 J -30963981.79 -30963981.57 -30963981.34 0.0063 0.0007

Venus -89488-11-09 02:23 J -30963756.60 -30963756.40 -30963756.18 0.0063 0.0024

Venus -89487-06-22 06:13 J -30963531.31 -30963531.24 -30963531.11 0.0063 0.0056

Mars -89478-09-24 19:39 J -30960150.00 -30960149.68 -30960149.34 0.0066 0.0004

Moon -89477-06-06 15:35 J -30959894.05 -30959893.85 -30959893.60 0.0067 0.0031

Earth -89477-06-06 16:18 J -30959894.04 -30959893.82 -30959893.55 0.0067 0.0029 \*

Mercury -89403-03-09 16:32 J -30932954.85 -30932954.81 -30932954.75 0.0085 0.0079

Mercury -89403-06-05 17:44 J -30932866.83 -30932866.76 -30932866.67 0.0084 0.0066

Mercury -89403-09-01 19:11 J -30932778.79 -30932778.70 -30932778.59 0.0084 0.0054

Mercury -89403-11-28 20:37 J -30932690.75 -30932690.64 -30932690.52 0.0084 0.0041

Mercury -89402-02-24 21:49 J -30932602.71 -30932602.59 -30932602.46 0.0084 0.0029

Mercury -89402-05-23 23:15 J -30932514.66 -30932514.53 -30932514.40 0.0084 0.0017

Mercury -89402-08-20 00:27 J -30932426.61 -30932426.48 -30932426.35 0.0084 0.0005

Mercury -89402-11-16 01:39 J -30932338.56 -30932338.43 -30932338.30 0.0084 0.0007

Mercury -89401-02-12 02:51 J -30932250.50 -30932250.38 -30932250.25 0.0084 0.0019

Mercury -89401-05-10 04:03 J -30932162.45 -30932162.33 -30932162.20 0.0083 0.0031

Mercury -89401-08-06 05:15 J -30932074.39 -30932074.28 -30932074.16 0.0083 0.0042

Mercury -89401-11-02 06:27 J -30931986.32 -30931986.23 -30931986.12 0.0083 0.0054

Mercury -89400-01-29 07:39 J -30931898.25 -30931898.18 -30931898.09 0.0083 0.0066

Mercury -89400-04-27 08:51 J -30931810.17 -30931810.13 -30931810.07 0.0083 0.0077

Venus -89399-10-03 07:11 J -30931286.27 -30931286.20 -30931286.08 0.0082 0.0073

Venus	-89398-05-16 18:13 J	-30931060.96	-30931060.74	-30931060.53	0.0082	0.0006
Venus	-89398-12-28 03:49 J	-30930835.46	-30930835.34	-30930835.17	0.0081	0.0061
Moon	-89391-12-11 20:51 J	-30928294.87	-30928294.63	-30928294.39	0.0078	0.0015
Earth	-89391-12-11 22:47 J	-30928294.79	-30928294.55	-30928294.29	0.0078	0.0012 *
Mercury	-89250-12-16 18:42 J	-30876789.77	-30876789.72	-30876789.63	0.0060	0.0056
Mercury	-89249-03-13 20:23 J	-30876701.75	-30876701.65	-30876701.53	0.0060	0.0050
Mercury	-89249-06-09 21:35 J	-30876613.71	-30876613.60	-30876613.44	0.0060	0.0044
Mercury	-89249-09-05 23:30 J	-30876525.67	-30876525.52	-30876525.36	0.0060	0.0037
Mercury	-89249-12-03 00:42 J	-30876437.62	-30876437.47	-30876437.29	0.0060	0.0030
Mercury	-89248-03-01 02:23 J	-30876349.57	-30876349.40	-30876349.21	0.0060	0.0024
Mercury	-89248-05-28 03:35 J	-30876261.52	-30876261.35	-30876261.15	0.0060	0.0018
Mercury	-89248-08-24 05:15 J	-30876173.47	-30876173.28	-30876173.08	0.0061	0.0011
Mercury	-89248-11-20 06:42 J	-30876085.41	-30876085.22	-30876085.02	0.0061	0.0005
Mercury	-89247-02-16 08:23 J	-30875997.35	-30875997.15	-30875996.95	0.0061	0.0003
Mercury	-89247-05-15 09:35 J	-30875909.28	-30875909.10	-30875908.89	0.0061	0.0010
Mercury	-89247-08-11 11:15 J	-30875821.22	-30875821.03	-30875820.84	0.0061	0.0016
Mercury	-89247-11-07 12:27 J	-30875733.15	-30875732.98	-30875732.78	0.0061	0.0023
Mercury	-89246-02-03 14:23 J	-30875645.07	-30875644.90	-30875644.73	0.0061	0.0029
Mercury	-89246-05-02 15:35 J	-30875557.00	-30875556.85	-30875556.68	0.0061	0.0036
Mercury	-89246-07-29 17:01 J	-30875468.91	-30875468.79	-30875468.64	0.0061	0.0043
Mercury	-89246-10-25 18:13 J	-30875380.82	-30875380.74	-30875380.60	0.0061	0.0050
Mercury	-89245-01-21 20:23 J	-30875292.72	-30875292.65	-30875292.58	0.0061	0.0057
Venus	-89242-12-07 10:18 J	-30873877.22	-30873877.07	-30873876.87	0.0062	0.0041
Venus	-89241-07-19 14:51 J	-30873652.09	-30873651.88	-30873651.64	0.0063	0.0010
Venus	-89240-03-01 19:25 J	-30873426.90	-30873426.69	-30873426.47	0.0063	0.0022
Venus	-89240-10-12 23:15 J	-30873201.62	-30873201.53	-30873201.39	0.0063	0.0054
Moon	-89230-06-08 10:47 J	-30869676.17	-30869676.05	-30869675.87	0.0067	0.0055
Earth	-89230-06-08 12:42 J	-30869676.10	-30869675.97	-30869675.78	0.0067	0.0054 *
Earth	-89229-06-09 05:01 J	-30869309.46	-30869309.29	-30869309.05	0.0067	0.0042
Moon	-89229-06-09 06:13 J	-30869309.44	-30869309.24	-30869309.01	0.0067	0.0042 *

Mercury -89156-07-15 03:49 J -30842610.39 -30842610.34 -30842610.27 0.0085 0.0076

Mercury -89156-10-11 05:01 J -30842522.36 -30842522.29 -30842522.19 0.0084 0.0064

Mercury -89155-01-07 06:13 J -30842434.33 -30842434.24 -30842434.12 0.0084 0.0052

Mercury -89155-04-05 07:54 J -30842346.29 -30842346.17 -30842346.05 0.0084 0.0039

Mercury -89155-07-02 09:06 J -30842258.24 -30842258.12 -30842257.99 0.0084 0.0026

Mercury -89155-09-28 10:18 J -30842170.19 -30842170.07 -30842169.93 0.0084 0.0015

Mercury -89155-12-25 11:44 J -30842082.14 -30842082.01 -30842081.88 0.0084 0.0003

Mercury -89154-03-23 12:56 J -30841994.09 -30841993.96 -30841993.83 0.0084 0.0010

Mercury -89154-06-19 14:08 J -30841906.04 -30841905.91 -30841905.78 0.0084 0.0021

Mercury -89154-09-15 15:20 J -30841817.98 -30841817.86 -30841817.73 0.0083 0.0033

Mercury -89154-12-12 16:18 J -30841729.92 -30841729.82 -30841729.69 0.0083 0.0046

Mercury -89153-03-09 17:44 J -30841641.85 -30841641.76 -30841641.66 0.0083 0.0056

Mercury -89153-06-05 18:56 J -30841553.78 -30841553.71 -30841553.63 0.0083 0.0068

Mercury -89153-09-01 20:08 J -30841465.69 -30841465.66 -30841465.62 0.0083 0.0079

Venus -89151-01-24 00:42 J -30840956.54 -30840956.47 -30840956.36 0.0082 0.0075

Venus -89151-09-06 11:44 J -30840731.22 -30840731.01 -30840730.79 0.0082 0.0007

Venus -89150-04-19 21:35 J -30840505.73 -30840505.60 -30840505.43 0.0081 0.0059

Mars -89144-06-21 12:42 J -30838251.27 -30838250.97 -30838250.66 0.0078 0.0003

Moon -89144-12-12 16:03 J -30838077.05 -30838076.83 -30838076.60 0.0078 0.0031

Earth -89144-12-12 18:56 J -30838076.94 -30838076.71 -30838076.47 0.0078 0.0027 \*

Mercury -89002-01-25 03:20 J -30786533.37 -30786533.36 -30786533.32 0.0060 0.0059

Mercury -89002-04-23 04:32 J -30786445.38 -30786445.31 -30786445.20 0.0060 0.0053

Mercury -89002-07-20 05:59 J -30786357.35 -30786357.25 -30786357.10 0.0060 0.0047

Mercury -89002-10-16 07:39 J -30786269.31 -30786269.18 -30786269.02 0.0060 0.0041

Mercury -89001-01-12 08:51 J -30786181.27 -30786181.13 -30786180.94 0.0060 0.0035

Mercury -89001-04-09 10:47 J -30786093.22 -30786093.05 -30786092.87 0.0060 0.0028

Mercury -89001-07-06 11:59 J -30786005.17 -30786005.00 -30786004.80 0.0060 0.0022

Mercury -89001-10-02 13:39 J -30785917.11 -30785916.93 -30785916.73 0.0060 0.0015

Mercury -89001-12-29 15:20 J -30785829.06 -30785828.86 -30785828.67 0.0061 0.0008

# 89TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 89th millennium BCE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
TRANSIT								
TIME								
Mercury	-89000-03-27 16:47 J	-30785741.00	-30785740.80	-30785740.60	0.0061	0.0001		
Mercury	-89000-06-23 18:13 J	-30785652.93	-30785652.74	-30785652.54	0.0061	0.0005		
Mercury	-89000-09-19 19:39 J	-30785564.87	-30785564.68	-30785564.48	0.0061	0.0012		
Mercury	-89000-12-16 20:51 J	-30785476.80	-30785476.63	-30785476.43	0.0061	0.0019		
Mercury	-88999-03-14 22:32 J	-30785388.73	-30785388.56	-30785388.37	0.0061	0.0025		
Mercury	-88999-06-10 23:59 J	-30785300.66	-30785300.50	-30785300.32	0.0061	0.0032		
Mercury	-88999-09-07 01:11 J	-30785212.58	-30785212.45	-30785212.27	0.0061	0.0039		
Mercury	-88999-12-04 03:06 J	-30785124.49	-30785124.37	-30785124.23	0.0061	0.0046		
Mercury	-88998-03-02 04:32 J	-30785036.40	-30785036.31	-30785036.20	0.0061	0.0052		
Mercury	-88998-05-29 05:44 J	-30784948.28	-30784948.26	-30784948.19	0.0061	0.0060		
Venus	-88994-03-30 04:18 J	-30783547.48	-30783547.32	-30783547.13	0.0062	0.0040		
Venus	-88994-11-10 08:37 J	-30783322.36	-30783322.14	-30783321.91	0.0063	0.0009		
Venus	-88993-06-22 12:42 J	-30783097.17	-30783096.97	-30783096.74	0.0063	0.0023		
Venus	-88992-02-02 17:01 J	-30782871.89	-30782871.79	-30782871.66	0.0063	0.0054		
Mars	-88983-05-24 17:44 J	-30779474.09	-30779473.76	-30779473.43	0.0066	0.0001		
Earth	-88982-06-11 03:49 J	-30779091.58	-30779091.34	-30779091.08	0.0067	0.0021		
Moon	-88982-06-11 06:13 J	-30779091.50	-30779091.24	-30779090.97	0.0067	0.0018	*	
Mercury	-88909-08-23 14:37 J	-30752353.92	-30752353.89	-30752353.85	0.0085	0.0081		
Mercury	-88909-11-19 15:49 J	-30752265.91	-30752265.84	-30752265.76	0.0085	0.0069		
Mercury	-88908-02-15 17:01 J	-30752177.88	-30752177.79	-30752177.68	0.0084	0.0057		

Mercury -88908-05-14 18:27 J -30752089.84 -30752089.73 -30752089.61 0.0084 0.0044

Mercury -88908-08-10 19:39 J -30752001.79 -30752001.68 -30752001.55 0.0084 0.0032

Mercury -88908-11-06 21:06 J -30751913.75 -30751913.62 -30751913.49 0.0084 0.0020

Mercury -88907-02-02 22:18 J -30751825.70 -30751825.57 -30751825.43 0.0084 0.0008

Mercury -88907-05-01 23:44 J -30751737.65 -30751737.51 -30751737.38 0.0084 0.0005

Mercury -88907-07-29 00:42 J -30751649.59 -30751649.47 -30751649.33 0.0084 0.0017

Mercury -88907-10-25 02:08 J -30751561.53 -30751561.41 -30751561.28 0.0084 0.0028

Mercury -88906-01-21 03:20 J -30751473.47 -30751473.36 -30751473.24 0.0083 0.0040

Mercury -88906-04-19 04:32 J -30751385.41 -30751385.31 -30751385.20 0.0083 0.0051

Mercury -88906-07-16 05:30 J -30751297.34 -30751297.27 -30751297.17 0.0083 0.0063

Mercury -88906-10-12 06:56 J -30751209.26 -30751209.21 -30751209.15 0.0083 0.0074

Venus -88904-05-16 20:51 J -30750626.75 -30750626.63 -30750626.50 0.0082 0.0066

Venus -88904-12-28 07:25 J -30750401.40 -30750401.19 -30750400.97 0.0082 0.0001

Venus -88903-08-10 17:30 J -30750175.88 -30750175.77 -30750175.63 0.0081 0.0066

Moon -88897-12-13 14:37 J -30747859.07 -30747858.89 -30747858.70 0.0078 0.0051

Earth -88897-12-13 17:59 J -30747858.92 -30747858.75 -30747858.55 0.0078 0.0052 \*

Mercury -88755-06-01 13:54 J -30696188.98 -30696188.92 -30696188.81 0.0060 0.0054

Mercury -88755-08-28 16:03 J -30696100.95 -30696100.83 -30696100.72 0.0060 0.0048

Mercury -88755-11-24 17:01 J -30696012.91 -30696012.79 -30696012.63 0.0060 0.0042

Mercury -88754-02-20 18:27 J -30695924.87 -30695924.73 -30695924.55 0.0060 0.0035

Mercury -88754-05-19 20:08 J -30695836.82 -30695836.66 -30695836.48 0.0060 0.0029

Mercury -88754-08-15 21:20 J -30695748.77 -30695748.61 -30695748.41 0.0060 0.0023

Mercury -88754-11-11 23:01 J -30695660.72 -30695660.54 -30695660.34 0.0060 0.0016

Mercury -88753-02-08 00:27 J -30695572.66 -30695572.48 -30695572.27 0.0061 0.0010

Mercury -88753-05-06 02:08 J -30695484.60 -30695484.41 -30695484.21 0.0061 0.0003

Mercury -88753-08-02 03:35 J -30695396.54 -30695396.35 -30695396.15 0.0061 0.0004

Mercury -88753-10-29 05:01 J -30695308.48 -30695308.29 -30695308.09 0.0061 0.0011

Mercury -88752-01-25 06:27 J -30695220.41 -30695220.23 -30695220.03 0.0061 0.0018

Mercury -88752-04-23 07:54 J -30695132.34 -30695132.17 -30695131.98 0.0061 0.0024

Mercury -88752-07-20 09:20 J -30695044.26 -30695044.11 -30695043.93 0.0061 0.0031



Mercury -88752-10-16 11:15 J -30694956.19 -30694956.03 -30694955.88 0.0061 0.0037  
 Mercury -88751-01-12 12:27 J -30694868.10 -30694867.98 -30694867.83 0.0061 0.0044  
 Mercury -88751-04-10 13:39 J -30694780.01 -30694779.93 -30694779.80 0.0061 0.0052  
 Mercury -88751-07-07 15:06 J -30694691.90 -30694691.87 -30694691.78 0.0061 0.0059  
 Venus -88747-07-20 23:44 J -30693217.69 -30693217.51 -30693217.31 0.0062 0.0035  
 Venus -88746-03-03 04:18 J -30692992.54 -30692992.32 -30692992.09 0.0063 0.0004  
 Venus -88746-10-14 08:08 J -30692767.34 -30692767.16 -30692766.93 0.0063 0.0028  
 Venus -88745-05-26 12:27 J -30692542.03 -30692541.98 -30692541.88 0.0063 0.0059  
 Earth -88735-06-12 04:47 J -30688873.55 -30688873.30 -30688873.02 0.0067 0.0010  
 Moon -88735-06-12 08:08 J -30688873.42 -30688873.16 -30688872.88 0.0067 0.0013 \*  
 Mercury -88662-12-30 02:37 J -30662009.45 -30662009.39 -30662009.31 0.0085 0.0073  
 Mercury -88661-03-27 04:03 J -30661921.42 -30661921.33 -30661921.23 0.0084 0.0060  
 Mercury -88661-06-23 05:15 J -30661833.38 -30661833.28 -30661833.16 0.0084 0.0048  
 Mercury -88661-09-19 06:27 J -30661745.34 -30661745.23 -30661745.10 0.0084 0.0037  
 Mercury -88661-12-16 07:54 J -30661657.29 -30661657.17 -30661657.04 0.0084 0.0024  
 Mercury -88660-03-14 09:20 J -30661569.24 -30661569.11 -30661568.98 0.0084 0.0012  
 Mercury -88660-06-10 10:32 J -30661481.19 -30661481.06 -30661480.93 0.0084 0.0000  
 Mercury -88660-09-06 11:44 J -30661393.14 -30661393.01 -30661392.88 0.0084 0.0012  
 Mercury -88660-12-03 12:56 J -30661305.08 -30661304.96 -30661304.83 0.0084 0.0024  
 Mercury -88659-03-01 14:08 J -30661217.02 -30661216.91 -30661216.78 0.0083 0.0036  
 Mercury -88659-05-28 15:20 J -30661128.96 -30661128.86 -30661128.74 0.0083 0.0047  
 Mercury -88659-08-24 16:32 J -30661040.89 -30661040.81 -30661040.71 0.0083 0.0059  
 Mercury -88659-11-20 17:44 J -30660952.82 -30660952.76 -30660952.68 0.0083 0.0071  
 Mercury -88658-02-16 18:56 J -30660864.72 -30660864.71 -30660864.68 0.0083 0.0082  
 Venus -88657-09-06 17:30 J -30660296.92 -30660296.77 -30660296.61 0.0082 0.0056  
 Venus -88656-04-20 04:03 J -30660071.55 -30660071.33 -30660071.12 0.0082 0.0010  
 Venus -88656-12-01 14:08 J -30659845.99 -30659845.91 -30659845.83 0.0081 0.0075  
 Moon -88650-12-15 14:51 J -30657640.95 -30657640.88 -30657640.77 0.0078 0.0072  
 Earth -88650-12-15 18:13 J -30657640.78 -30657640.74 -30657640.64 0.0078 0.0075 \*  
 Mars -88649-02-20 05:44 J -30657574.52 -30657574.26 -30657573.98 0.0078 0.0034

Earth -88649-12-16 17:44 J -30657273.86 -30657273.76 -30657273.62 0.0077 0.0068  
 Moon -88649-12-16 21:06 J -30657273.74 -30657273.62 -30657273.47 0.0077 0.0066 \*  
 Mercury -88508-04-13 23:15 J -30606020.56 -30606020.53 -30606020.48 0.0060 0.0058  
 Mercury -88508-07-11 00:27 J -30605932.56 -30605932.48 -30605932.37 0.0060 0.0052  
 Mercury -88508-10-07 01:39 J -30605844.53 -30605844.43 -30605844.28 0.0060 0.0047  
 Mercury -88507-01-03 03:35 J -30605756.49 -30605756.35 -30605756.20 0.0060 0.0039  
 Mercury -88507-04-01 04:47 J -30605668.44 -30605668.30 -30605668.12 0.0060 0.0033  
 Mercury -88507-06-28 06:27 J -30605580.40 -30605580.23 -30605580.05 0.0060 0.0027  
 Mercury -88507-09-24 07:54 J -30605492.34 -30605492.17 -30605491.98 0.0060 0.0020  
 Mercury -88507-12-21 09:35 J -30605404.29 -30605404.10 -30605403.91 0.0060 0.0014  
 Mercury -88506-03-19 11:01 J -30605316.23 -30605316.04 -30605315.84 0.0061 0.0007  
 Mercury -88506-06-15 12:27 J -30605228.17 -30605227.98 -30605227.78 0.0061 0.0001  
 Mercury -88506-09-11 14:08 J -30605140.11 -30605139.91 -30605139.72 0.0061 0.0006  
 Mercury -88506-12-08 15:20 J -30605052.04 -30605051.86 -30605051.66 0.0061 0.0013  
 Mercury -88505-03-05 17:01 J -30604963.97 -30604963.79 -30604963.60 0.0061 0.0019  
 Mercury -88505-06-01 18:13 J -30604875.90 -30604875.74 -30604875.55 0.0061 0.0026  
 Mercury -88505-08-28 19:39 J -30604787.83 -30604787.68 -30604787.50 0.0061 0.0033  
 Mercury -88505-11-24 21:20 J -30604699.75 -30604699.61 -30604699.45 0.0061 0.0039  
 Mercury -88504-02-20 22:47 J -30604611.66 -30604611.55 -30604611.41 0.0061 0.0046  
 Mercury -88504-05-19 23:59 J -30604523.57 -30604523.50 -30604523.38 0.0061 0.0054  
 Mercury -88504-08-16 01:25 J -30604435.45 -30604435.44 -30604435.37 0.0061 0.0061  
 Venus -88500-03-30 17:01 J -30603112.87 -30603112.79 -30603112.65 0.0062 0.0055  
 Venus -88500-11-10 21:35 J -30602887.80 -30602887.60 -30602887.38 0.0063 0.0024  
 Venus -88499-06-24 01:39 J -30602662.65 -30602662.43 -30602662.19 0.0063 0.0008  
 Venus -88498-02-04 05:30 J -30602437.42 -30602437.27 -30602437.06 0.0063 0.0039  
 Mars -88488-01-22 09:35 J -30598797.29 -30598797.10 -30598796.83 0.0067 0.0049  
 Earth -88488-06-13 10:47 J -30598655.31 -30598655.05 -30598654.78 0.0067 0.0010  
 Moon -88488-06-13 14:37 J -30598655.15 -30598654.89 -30598654.62 0.0067 0.0009 \*  
 Mercury -88415-11-11 13:39 J -30571840.96 -30571840.93 -30571840.88 0.0085 0.0081  
 Mercury -88414-02-07 14:51 J -30571752.94 -30571752.88 -30571752.79 0.0085 0.0069

Mercury -88414-05-06 16:32 J -30571664.91 -30571664.81 -30571664.71 0.0084 0.0056

Mercury -88414-08-02 17:44 J -30571576.87 -30571576.76 -30571576.64 0.0084 0.0044

Mercury -88414-10-29 19:11 J -30571488.83 -30571488.70 -30571488.58 0.0084 0.0032

Mercury -88413-01-25 20:23 J -30571400.78 -30571400.65 -30571400.52 0.0084 0.0019

Mercury -88413-04-22 21:35 J -30571312.73 -30571312.60 -30571312.47 0.0084 0.0008

Mercury -88413-07-19 22:47 J -30571224.68 -30571224.55 -30571224.41 0.0084 0.0005

Mercury -88413-10-15 23:59 J -30571136.62 -30571136.50 -30571136.36 0.0084 0.0017

Mercury -88412-01-12 01:25 J -30571048.57 -30571048.44 -30571048.32 0.0084 0.0028

Mercury -88412-04-10 02:37 J -30570960.51 -30570960.39 -30570960.27 0.0083 0.0040

Mercury -88412-07-07 03:35 J -30570872.44 -30570872.35 -30570872.24 0.0083 0.0052

Mercury -88412-10-03 04:47 J -30570784.37 -30570784.30 -30570784.20 0.0083 0.0063

Mercury -88412-12-30 06:13 J -30570696.29 -30570696.24 -30570696.18 0.0083 0.0074

Venus -88410-12-29 18:56 J -30569966.91 -30569966.71 -30569966.51 0.0082 0.0029

Venus -88409-08-11 05:01 J -30569741.47 -30569741.29 -30569741.08 0.0082 0.0037

Moon -88403-12-16 22:47 J -30567422.56 -30567422.55 -30567422.49 0.0078 0.0077

Earth -88403-12-17 01:39 J -30567422.50 -30567422.43 -30567422.33 0.0078 0.0073 \*

Earth -88402-12-19 01:11 J -30567055.54 -30567055.45 -30567055.33 0.0077 0.0070

Moon -88402-12-19 04:18 J -30567055.38 -30567055.32 -30567055.23 0.0077 0.0074 \*

Mercury -88261-02-25 09:35 J -30515852.12 -30515852.10 -30515852.03 0.0060 0.0058

Mercury -88261-05-23 11:01 J -30515764.11 -30515764.04 -30515763.92 0.0060 0.0052

Mercury -88261-08-19 12:42 J -30515676.08 -30515675.97 -30515675.83 0.0060 0.0046

Mercury -88261-11-15 13:54 J -30515588.05 -30515587.92 -30515587.75 0.0060 0.0040

Mercury -88260-02-11 15:49 J -30515500.00 -30515499.84 -30515499.67 0.0060 0.0033

Mercury -88260-05-10 17:01 J -30515411.95 -30515411.79 -30515411.60 0.0060 0.0027

Mercury -88260-08-06 18:42 J -30515323.90 -30515323.72 -30515323.53 0.0060 0.0020

Mercury -88260-11-02 20:08 J -30515235.85 -30515235.66 -30515235.46 0.0061 0.0013

Mercury -88259-01-29 21:49 J -30515147.79 -30515147.59 -30515147.40 0.0061 0.0007

Mercury -88259-04-27 23:15 J -30515059.73 -30515059.53 -30515059.34 0.0061 0.0001

Mercury -88259-07-25 00:27 J -30514971.66 -30514971.48 -30514971.28 0.0061 0.0007

Mercury -88259-10-21 02:08 J -30514883.60 -30514883.41 -30514883.22 0.0061 0.0013

Mercury -88258-01-17 03:20 J -30514795.53 -30514795.36 -30514795.16 0.0061 0.0020

Mercury -88258-04-15 05:01 J -30514707.46 -30514707.29 -30514707.11 0.0061 0.0026

Mercury -88258-07-12 06:27 J -30514619.38 -30514619.23 -30514619.05 0.0061 0.0033

Mercury -88258-10-08 07:39 J -30514531.30 -30514531.18 -30514531.01 0.0061 0.0040

Mercury -88257-01-04 09:35 J -30514443.22 -30514443.10 -30514442.97 0.0061 0.0046

Mercury -88257-04-01 10:47 J -30514355.12 -30514355.05 -30514354.93 0.0061 0.0054

Mercury -88257-06-28 12:13 J -30514267.00 -30514266.99 -30514266.93 0.0061 0.0061

Venus -88253-07-21 18:27 J -30512782.90 -30512782.73 -30512782.53 0.0062 0.0035

Venus -88252-03-03 23:01 J -30512557.76 -30512557.54 -30512557.31 0.0063 0.0004

Venus -88252-10-15 03:20 J -30512332.56 -30512332.36 -30512332.15 0.0063 0.0027

Venus -88251-05-28 06:56 J -30512107.25 -30512107.21 -30512107.10 0.0063 0.0060

Mars -88242-06-13 09:20 J -30508804.39 -30508804.11 -30508803.77 0.0066 0.0025

Moon -88242-06-14 04:03 J -30508803.34 -30508803.33 -30508803.25 0.0066 0.0066

Earth -88241-06-14 22:47 J -30508436.77 -30508436.55 -30508436.29 0.0067 0.0029

Moon -88241-06-15 02:37 J -30508436.63 -30508436.39 -30508436.15 0.0067 0.0027 \*

Mercury -88168-09-24 01:54 J -30481672.45 -30481672.42 -30481672.37 0.0085 0.0081

Mercury -88168-12-21 03:20 J -30481584.43 -30481584.36 -30481584.28 0.0085 0.0069

Mercury -88167-03-19 04:32 J -30481496.40 -30481496.31 -30481496.20 0.0084 0.0057

Mercury -88167-06-15 05:59 J -30481408.36 -30481408.25 -30481408.13 0.0084 0.0044

Mercury -88167-09-11 07:11 J -30481320.32 -30481320.20 -30481320.07 0.0084 0.0032

Mercury -88167-12-08 08:37 J -30481232.27 -30481232.14 -30481232.01 0.0084 0.0020

Mercury -88166-03-06 09:49 J -30481144.22 -30481144.09 -30481143.95 0.0084 0.0008

Mercury -88166-06-02 11:15 J -30481056.17 -30481056.03 -30481055.90 0.0084 0.0005

Mercury -88166-08-29 12:27 J -30480968.11 -30480967.98 -30480967.85 0.0084 0.0016

Mercury -88166-11-25 13:39 J -30480880.05 -30480879.93 -30480879.80 0.0084 0.0028

Mercury -88165-02-21 14:37 J -30480791.99 -30480791.89 -30480791.76 0.0083 0.0040

Mercury -88165-05-19 16:03 J -30480703.93 -30480703.83 -30480703.72 0.0083 0.0051

Mercury -88165-08-15 17:15 J -30480615.86 -30480615.78 -30480615.69 0.0083 0.0062

Mercury -88165-11-11 18:13 J -30480527.78 -30480527.74 -30480527.67 0.0083 0.0074

Venus -88163-09-08 13:54 J -30479862.06 -30479861.92 -30479861.74 0.0082 0.0053

Venus -88162-04-22 00:42 J -30479636.68 -30479636.47 -30479636.26 0.0082 0.0013

Venus -88162-12-03 10:47 J -30479411.10 -30479411.05 -30479410.98 0.0081 0.0078

Moon -88156-12-18 13:39 J -30477204.12 -30477203.93 -30477203.71 0.0078 0.0048

Earth -88156-12-18 14:51 J -30477204.06 -30477203.88 -30477203.68 0.0078 0.0051 \*

Mercury -88014-01-07 21:49 J -30425683.66 -30425683.59 -30425683.50 0.0060 0.0054

Mercury -88014-04-05 23:01 J -30425595.63 -30425595.54 -30425595.40 0.0060 0.0049

Mercury -88014-07-03 00:56 J -30425507.60 -30425507.46 -30425507.32 0.0060 0.0042

Mercury -88014-09-29 02:08 J -30425419.55 -30425419.41 -30425419.24 0.0060 0.0036

Mercury -88014-12-26 03:20 J -30425331.51 -30425331.36 -30425331.17 0.0060 0.0030

Mercury -88013-03-23 05:01 J -30425243.46 -30425243.29 -30425243.10 0.0060 0.0023

Mercury -88013-06-19 06:27 J -30425155.40 -30425155.23 -30425155.03 0.0061 0.0017

Mercury -88013-09-15 08:08 J -30425067.35 -30425067.16 -30425066.96 0.0061 0.0010

Mercury -88013-12-12 09:35 J -30424979.29 -30424979.10 -30424978.90 0.0061 0.0004

Mercury -88012-03-10 11:01 J -30424891.23 -30424891.04 -30424890.84 0.0061 0.0004

Mercury -88012-06-06 12:42 J -30424803.16 -30424802.97 -30424802.78 0.0061 0.0010

Mercury -88012-09-02 13:54 J -30424715.10 -30424714.92 -30424714.72 0.0061 0.0017

Mercury -88012-11-29 15:20 J -30424627.03 -30424626.86 -30424626.67 0.0061 0.0024

Mercury -88011-02-25 17:01 J -30424538.95 -30424538.79 -30424538.61 0.0061 0.0030

Mercury -88011-05-24 18:13 J -30424450.88 -30424450.74 -30424450.56 0.0061 0.0037

Mercury -88011-08-20 19:39 J -30424362.79 -30424362.68 -30424362.52 0.0061 0.0044

Mercury -88011-11-16 21:35 J -30424274.70 -30424274.60 -30424274.48 0.0061 0.0051

Mercury -88010-02-12 22:47 J -30424186.60 -30424186.55 -30424186.46 0.0061 0.0058

Venus -88006-04-01 18:13 J -30422677.90 -30422677.74 -30422677.55 0.0063 0.0039

Venus -88006-11-12 22:47 J -30422452.78 -30422452.55 -30422452.32 0.0063 0.0008

Venus -88005-06-25 02:51 J -30422227.58 -30422227.38 -30422227.16 0.0063 0.0023

Venus -88004-02-05 07:25 J -30422002.30 -30422002.19 -30422002.08 0.0063 0.0055

# 88TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 88th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	-87995-06-15 23:30 J	-30418584.74	-30418584.52	-30418584.28	0.0067	0.0037		
Earth	-87995-06-15 23:15 J	-30418584.73	-30418584.53	-30418584.27	0.0067	0.0035	*	
Earth	-87994-06-17 15:49 J	-30418217.91	-30418217.84	-30418217.71	0.0067	0.0062		
Moon	-87994-06-17 17:59 J	-30418217.76	-30418217.75	-30418217.67	0.0067	0.0066	*	
Mercury	-87921-05-10 14:37 J	-30391591.91	-30391591.89	-30391591.86	0.0085	0.0083		
Mercury	-87921-08-06 15:49 J	-30391503.90	-30391503.84	-30391503.75	0.0085	0.0071		
Mercury	-87921-11-02 17:15 J	-30391415.87	-30391415.78	-30391415.68	0.0084	0.0058		
Mercury	-87920-01-29 18:42 J	-30391327.83	-30391327.72	-30391327.61	0.0084	0.0046		
Mercury	-87920-04-27 19:54 J	-30391239.79	-30391239.67	-30391239.54	0.0084	0.0034		
Mercury	-87920-07-24 21:20 J	-30391151.74	-30391151.61	-30391151.48	0.0084	0.0022		
Mercury	-87920-10-20 22:32 J	-30391063.69	-30391063.56	-30391063.43	0.0084	0.0010		
Mercury	-87919-01-16 23:44 J	-30390975.64	-30390975.51	-30390975.37	0.0084	0.0004		
Mercury	-87919-04-15 00:56 J	-30390887.58	-30390887.46	-30390887.32	0.0084	0.0015		
Mercury	-87919-07-12 02:23 J	-30390799.53	-30390799.40	-30390799.27	0.0084	0.0026		
Mercury	-87919-10-08 03:35 J	-30390711.47	-30390711.35	-30390711.23	0.0083	0.0038		
Mercury	-87918-01-04 04:47 J	-30390623.40	-30390623.30	-30390623.19	0.0083	0.0049		
Mercury	-87918-04-02 05:59 J	-30390535.33	-30390535.25	-30390535.15	0.0083	0.0061		
Mercury	-87918-06-29 07:11 J	-30390447.26	-30390447.20	-30390447.13	0.0083	0.0072		
Venus	-87916-05-19 15:20 J	-30389757.00	-30389756.86	-30389756.68	0.0082	0.0053		
Venus	-87916-12-31 02:08 J	-30389531.62	-30389531.41	-30389531.20	0.0082	0.0013		
Venus	-87915-08-13 12:27 J	-30389306.05	-30389305.98	-30389305.91	0.0081	0.0077		
Earth	-87909-12-20 13:25 J	-30386985.19	-30386984.94	-30386984.69	0.0078	0.0003		

Moon -87909-12-20 14:23 J -30386985.16 -30386984.90 -30386984.64 0.0078 0.0002 \*  
 Mercury -87768-05-28 08:08 J -30335691.17 -30335691.16 -30335691.09 0.0060 0.0059  
 Mercury -87768-08-24 09:49 J -30335603.17 -30335603.09 -30335602.98 0.0060 0.0053  
 Mercury -87768-11-20 11:15 J -30335515.14 -30335515.03 -30335514.89 0.0060 0.0046  
 Mercury -87767-02-16 13:11 J -30335427.10 -30335426.95 -30335426.81 0.0060 0.0040  
 Mercury -87767-05-15 14:08 J -30335339.06 -30335338.91 -30335338.73 0.0060 0.0034  
 Mercury -87767-08-11 15:35 J -30335251.01 -30335250.85 -30335250.66 0.0060 0.0027  
 Mercury -87767-11-07 17:15 J -30335162.96 -30335162.78 -30335162.59 0.0061 0.0021  
 Mercury -87766-02-03 18:42 J -30335074.90 -30335074.72 -30335074.52 0.0061 0.0014  
 Mercury -87766-05-02 20:23 J -30334986.84 -30334986.65 -30334986.46 0.0061 0.0008  
 Mercury -87766-07-29 21:49 J -30334898.78 -30334898.59 -30334898.39 0.0061 0.0001  
 Mercury -87766-10-25 23:15 J -30334810.72 -30334810.53 -30334810.33 0.0061 0.0005  
 Mercury -87765-01-22 00:42 J -30334722.66 -30334722.47 -30334722.27 0.0061 0.0012  
 Mercury -87765-04-19 01:54 J -30334634.59 -30334634.42 -30334634.22 0.0061 0.0019  
 Mercury -87765-07-16 03:49 J -30334546.52 -30334546.34 -30334546.16 0.0061 0.0025  
 Mercury -87765-10-12 05:01 J -30334458.44 -30334458.29 -30334458.11 0.0061 0.0032  
 Mercury -87764-01-08 06:13 J -30334370.37 -30334370.24 -30334370.07 0.0061 0.0039  
 Mercury -87764-04-06 08:08 J -30334282.28 -30334282.16 -30334282.02 0.0061 0.0046  
 Mercury -87764-07-03 09:35 J -30334194.19 -30334194.10 -30334193.99 0.0061 0.0052  
 Mercury -87764-09-29 10:47 J -30334106.07 -30334106.05 -30334105.98 0.0061 0.0060  
 Venus -87760-12-10 20:37 J -30332572.81 -30332572.64 -30332572.43 0.0063 0.0035  
 Venus -87759-07-24 01:11 J -30332347.67 -30332347.45 -30332347.22 0.0063 0.0004  
 Venus -87758-03-06 05:30 J -30332122.46 -30332122.27 -30332122.05 0.0063 0.0027  
 Venus -87758-10-17 10:18 J -30331897.15 -30331897.07 -30331896.99 0.0063 0.0059  
 Earth -87748-06-17 22:47 J -30328365.80 -30328365.55 -30328365.28 0.0067 0.0014  
 Moon -87748-06-18 00:42 J -30328365.72 -30328365.47 -30328365.19 0.0067 0.0018 \*  
 Mercury -87675-12-26 04:18 J -30301511.35 -30301511.32 -30301511.26 0.0085 0.0079  
 Mercury -87674-03-24 05:59 J -30301423.33 -30301423.25 -30301423.17 0.0085 0.0066  
 Mercury -87674-06-20 07:11 J -30301335.30 -30301335.20 -30301335.09 0.0084 0.0054  
 Mercury -87674-09-16 08:37 J -30301247.26 -30301247.14 -30301247.03 0.0084 0.0042

Mercury -87674-12-13 09:49 J -30301159.21 -30301159.09 -30301158.96 0.0084 0.0029

Mercury -87673-03-10 11:01 J -30301071.16 -30301071.04 -30301070.90 0.0084 0.0018

Mercury -87673-06-06 12:27 J -30300983.11 -30300982.98 -30300982.85 0.0084 0.0006

Mercury -87673-09-02 13:39 J -30300895.06 -30300894.93 -30300894.80 0.0084 0.0006

Mercury -87673-11-29 14:51 J -30300807.01 -30300806.88 -30300806.75 0.0084 0.0018

Mercury -87672-02-25 16:03 J -30300718.95 -30300718.83 -30300718.70 0.0084 0.0030

Mercury -87672-05-24 17:15 J -30300630.89 -30300630.78 -30300630.66 0.0083 0.0042

Mercury -87672-08-20 18:27 J -30300542.82 -30300542.73 -30300542.62 0.0083 0.0053

Mercury -87672-11-16 19:39 J -30300454.75 -30300454.68 -30300454.59 0.0083 0.0065

Mercury -87671-02-12 20:51 J -30300366.67 -30300366.63 -30300366.57 0.0083 0.0076

Venus -87669-01-28 20:23 J -30299651.83 -30299651.65 -30299651.46 0.0082 0.0041

Venus -87669-09-10 06:56 J -30299426.41 -30299426.21 -30299426.00 0.0082 0.0024

Moon -87663-12-21 12:56 J -30297133.05 -30297132.96 -30297132.83 0.0078 0.0070

Earth -87663-12-21 16:32 J -30297132.90 -30297132.81 -30297132.70 0.0078 0.0071 \*

Mars -87662-08-03 03:35 J -30296908.44 -30296908.35 -30296908.18 0.0078 0.0070

Earth -87662-12-23 16:03 J -30296765.90 -30296765.83 -30296765.74 0.0078 0.0073

Moon -87662-12-23 18:42 J -30296765.78 -30296765.72 -30296765.61 0.0078 0.0073 \*

Mercury -87521-01-12 21:06 J -30245610.68 -30245610.62 -30245610.52 0.0060 0.0055

Mercury -87521-04-09 22:32 J -30245522.66 -30245522.56 -30245522.43 0.0060 0.0048

Mercury -87521-07-06 23:44 J -30245434.62 -30245434.51 -30245434.34 0.0060 0.0043

Mercury -87521-10-03 01:25 J -30245346.58 -30245346.44 -30245346.27 0.0060 0.0036

Mercury -87521-12-30 02:51 J -30245258.53 -30245258.38 -30245258.19 0.0060 0.0030

Mercury -87520-03-28 04:32 J -30245170.48 -30245170.31 -30245170.12 0.0061 0.0023

Mercury -87520-06-24 05:59 J -30245082.43 -30245082.25 -30245082.05 0.0061 0.0017

Mercury -87520-09-20 07:39 J -30244994.37 -30244994.18 -30244993.99 0.0061 0.0010

Mercury -87520-12-17 09:06 J -30244906.31 -30244906.12 -30244905.92 0.0061 0.0003

Mercury -87519-03-15 10:32 J -30244818.25 -30244818.06 -30244817.86 0.0061 0.0004

Mercury -87519-06-11 11:59 J -30244730.19 -30244730.00 -30244729.80 0.0061 0.0010

Mercury -87519-09-07 13:39 J -30244642.12 -30244641.93 -30244641.74 0.0061 0.0016

Mercury -87519-12-04 14:51 J -30244554.05 -30244553.88 -30244553.69 0.0061 0.0023



Mercury -87518-03-02 16:18 J -30244465.98 -30244465.82 -30244465.63 0.0061 0.0030

Mercury -87518-05-29 17:59 J -30244377.90 -30244377.75 -30244377.59 0.0061 0.0037

Mercury -87518-08-25 19:11 J -30244289.82 -30244289.70 -30244289.54 0.0061 0.0044

Mercury -87518-11-21 20:37 J -30244201.73 -30244201.64 -30244201.50 0.0061 0.0051

Mercury -87517-02-17 22:32 J -30244113.62 -30244113.56 -30244113.48 0.0061 0.0057

Venus -87513-01-08 20:23 J -30242692.71 -30242692.65 -30242692.53 0.0063 0.0058

Venus -87513-08-21 00:56 J -30242467.65 -30242467.46 -30242467.24 0.0063 0.0027

Venus -87512-04-03 05:44 J -30242242.49 -30242242.26 -30242242.03 0.0063 0.0004

Venus -87512-11-14 09:49 J -30242017.27 -30242017.09 -30242016.89 0.0063 0.0035

Moon -87502-06-19 04:18 J -30238513.55 -30238513.32 -30238513.05 0.0067 0.0023

Earth -87502-06-19 08:23 J -30238513.40 -30238513.15 -30238512.90 0.0067 0.0025 \*

Mercury -87428-05-15 17:59 J -30211518.78 -30211518.75 -30211518.70 0.0085 0.0080

Mercury -87428-08-11 19:25 J -30211430.76 -30211430.69 -30211430.60 0.0085 0.0068

Mercury -87428-11-07 20:37 J -30211342.73 -30211342.64 -30211342.53 0.0084 0.0056

Mercury -87427-02-03 22:03 J -30211254.69 -30211254.58 -30211254.46 0.0084 0.0043

Mercury -87427-05-02 23:15 J -30211166.65 -30211166.53 -30211166.40 0.0084 0.0031

Mercury -87427-07-30 00:42 J -30211078.60 -30211078.47 -30211078.34 0.0084 0.0019

Mercury -87427-10-26 01:54 J -30210990.55 -30210990.42 -30210990.28 0.0084 0.0007

Mercury -87426-01-22 03:20 J -30210902.50 -30210902.36 -30210902.23 0.0084 0.0005

Mercury -87426-04-20 04:32 J -30210814.44 -30210814.31 -30210814.18 0.0084 0.0017

Mercury -87426-07-17 05:44 J -30210726.38 -30210726.26 -30210726.13 0.0084 0.0028

Mercury -87426-10-13 06:42 J -30210638.32 -30210638.22 -30210638.09 0.0083 0.0041

Mercury -87425-01-09 08:08 J -30210550.26 -30210550.16 -30210550.05 0.0083 0.0052

Mercury -87425-04-06 09:06 J -30210462.19 -30210462.12 -30210462.02 0.0083 0.0064

Mercury -87425-07-03 10:32 J -30210374.11 -30210374.06 -30210374.00 0.0083 0.0074

Venus -87423-02-25 17:44 J -30209771.77 -30209771.76 -30209771.70 0.0082 0.0081

Venus -87423-10-09 04:47 J -30209546.50 -30209546.30 -30209546.08 0.0082 0.0016

Venus -87422-05-22 14:51 J -30209321.03 -30209320.88 -30209320.69 0.0081 0.0049

Mars -87416-12-23 15:06 J -30206914.05 -30206913.87 -30206913.65 0.0078 0.0058

Moon -87416-12-23 22:18 J -30206913.81 -30206913.57 -30206913.31 0.0078 0.0017 \*

Earth -87416-12-24 01:25 J -30206913.68 -30206913.44 -30206913.19 0.0078 0.0020 \*  
 Mercury -87275-03-06 08:23 J -30155706.16 -30155706.15 -30155706.11 0.0060 0.0059  
 Mercury -87275-06-02 09:35 J -30155618.17 -30155618.10 -30155617.99 0.0060 0.0054  
 Mercury -87275-08-29 11:01 J -30155530.14 -30155530.04 -30155529.90 0.0060 0.0047  
 Mercury -87275-11-25 12:42 J -30155442.10 -30155441.97 -30155441.81 0.0060 0.0041  
 Mercury -87274-02-21 13:54 J -30155354.06 -30155353.92 -30155353.74 0.0060 0.0035  
 Mercury -87274-05-20 15:49 J -30155266.01 -30155265.84 -30155265.66 0.0060 0.0028  
 Mercury -87274-08-16 17:01 J -30155177.96 -30155177.79 -30155177.59 0.0061 0.0022  
 Mercury -87274-11-12 18:42 J -30155089.90 -30155089.72 -30155089.53 0.0061 0.0015  
 Mercury -87273-02-08 20:08 J -30155001.85 -30155001.66 -30155001.46 0.0061 0.0009  
 Mercury -87273-05-06 21:49 J -30154913.79 -30154913.59 -30154913.40 0.0061 0.0002  
 Mercury -87273-08-02 23:15 J -30154825.73 -30154825.53 -30154825.34 0.0061 0.0005  
 Mercury -87273-10-30 00:42 J -30154737.66 -30154737.47 -30154737.28 0.0061 0.0011  
 Mercury -87272-01-26 01:54 J -30154649.59 -30154649.42 -30154649.22 0.0061 0.0018  
 Mercury -87272-04-24 03:35 J -30154561.52 -30154561.35 -30154561.16 0.0061 0.0024  
 Mercury -87272-07-21 05:01 J -30154473.45 -30154473.29 -30154473.11 0.0061 0.0031  
 Mercury -87272-10-17 06:13 J -30154385.37 -30154385.24 -30154385.06 0.0061 0.0038  
 Mercury -87271-01-13 08:08 J -30154297.29 -30154297.16 -30154297.02 0.0061 0.0045  
 Mercury -87271-04-11 09:20 J -30154209.19 -30154209.11 -30154208.98 0.0061 0.0052  
 Mercury -87271-07-08 10:47 J -30154121.08 -30154121.05 -30154120.97 0.0061 0.0059  
 Venus -87267-09-19 03:49 J -30152587.50 -30152587.34 -30152587.17 0.0063 0.0043  
 Venus -87266-05-02 07:54 J -30152362.38 -30152362.17 -30152361.93 0.0063 0.0013  
 Venus -87266-12-13 12:27 J -30152137.20 -30152136.98 -30152136.76 0.0063 0.0019  
 Venus -87265-07-25 16:18 J -30151911.93 -30151911.82 -30151911.66 0.0063 0.0050  
 Earth -87256-06-19 21:49 J -30148660.74 -30148660.59 -30148660.41 0.0067 0.0052  
 Moon -87256-06-19 23:01 J -30148660.69 -30148660.54 -30148660.35 0.0067 0.0051 \*  
 Moon -87255-06-21 11:59 J -30148294.20 -30148294.00 -30148293.78 0.0067 0.0043  
 Earth -87255-06-21 13:54 J -30148294.09 -30148293.92 -30148293.69 0.0067 0.0045 \*  
 Mercury -87182-10-04 08:23 J -30121526.20 -30121526.15 -30121526.09 0.0085 0.0077  
 Mercury -87182-12-31 09:35 J -30121438.17 -30121438.10 -30121438.00 0.0085 0.0065

Mercury -87181-03-28 11:01 J -30121350.14 -30121350.04 -30121349.93 0.0084 0.0052  
 Mercury -87181-06-24 12:13 J -30121262.09 -30121261.99 -30121261.86 0.0084 0.0041  
 Mercury -87181-09-20 13:39 J -30121174.05 -30121173.93 -30121173.80 0.0084 0.0028  
 Mercury -87181-12-17 15:06 J -30121086.00 -30121085.87 -30121085.74 0.0084 0.0016  
 Mercury -87180-03-15 16:18 J -30120997.95 -30120997.82 -30120997.68 0.0084 0.0005  
 Mercury -87180-06-11 17:44 J -30120909.90 -30120909.76 -30120909.63 0.0084 0.0008  
 Mercury -87180-09-07 18:56 J -30120821.84 -30120821.71 -30120821.58 0.0084 0.0020  
 Mercury -87180-12-04 19:54 J -30120733.78 -30120733.67 -30120733.54 0.0084 0.0032  
 Mercury -87179-03-02 21:20 J -30120645.72 -30120645.61 -30120645.49 0.0083 0.0043  
 Mercury -87179-05-29 22:32 J -30120557.66 -30120557.56 -30120557.46 0.0083 0.0054  
 Mercury -87179-08-25 23:44 J -30120469.59 -30120469.51 -30120469.43 0.0083 0.0066  
 Mercury -87179-11-22 00:42 J -30120381.50 -30120381.47 -30120381.41 0.0083 0.0077  
 Venus -87177-11-06 05:15 J -30119666.44 -30119666.28 -30119666.09 0.0082 0.0047  
 Venus -87176-06-19 15:49 J -30119441.04 -30119440.84 -30119440.62 0.0082 0.0018  
 Moon -87170-12-25 13:25 J -30117061.16 -30117060.94 -30117060.70 0.0078 0.0027  
 Earth -87170-12-25 13:39 J -30117061.15 -30117060.93 -30117060.67 0.0078 0.0023 \*  
 Mars -87169-05-15 08:23 J -30116919.29 -30116919.15 -30116918.94 0.0078 0.0063  
 Mercury -87029-07-24 21:06 J -30065713.66 -30065713.62 -30065713.54 0.0060 0.0057  
 Mercury -87029-10-20 23:01 J -30065625.64 -30065625.54 -30065625.43 0.0060 0.0051  
 Mercury -87028-01-16 23:59 J -30065537.61 -30065537.50 -30065537.35 0.0060 0.0045  
 Mercury -87028-04-15 01:25 J -30065449.57 -30065449.44 -30065449.27 0.0060 0.0039  
 Mercury -87028-07-12 03:06 J -30065361.52 -30065361.37 -30065361.19 0.0060 0.0032  
 Mercury -87028-10-08 04:32 J -30065273.48 -30065273.31 -30065273.12 0.0061 0.0026  
 Mercury -87027-01-04 06:13 J -30065185.42 -30065185.24 -30065185.05 0.0061 0.0019  
 Mercury -87027-04-02 07:25 J -30065097.37 -30065097.19 -30065096.99 0.0061 0.0013  
 Mercury -87027-06-29 09:06 J -30065009.31 -30065009.12 -30065008.92 0.0061 0.0006  
 Mercury -87027-09-25 10:32 J -30064921.25 -30064921.06 -30064920.86 0.0061 0.0002  
 Mercury -87027-12-22 12:13 J -30064833.19 -30064832.99 -30064832.80 0.0061 0.0007  
 Mercury -87026-03-20 13:25 J -30064745.12 -30064744.94 -30064744.74 0.0061 0.0014  
 Mercury -87026-06-16 15:06 J -30064657.05 -30064656.87 -30064656.68 0.0061 0.0020

Mercury	-87026-09-12 16:18 J	-30064568.98	-30064568.82	-30064568.63	0.0061	0.0027
Mercury	-87026-12-09 17:44 J	-30064480.90	-30064480.76	-30064480.58	0.0061	0.0034
Mercury	-87025-03-06 19:25 J	-30064392.82	-30064392.69	-30064392.53	0.0061	0.0041
Mercury	-87025-06-02 20:51 J	-30064304.74	-30064304.63	-30064304.49	0.0061	0.0047
Mercury	-87025-08-29 22:03 J	-30064216.64	-30064216.58	-30064216.46	0.0061	0.0055
Mercury	-87025-11-26 00:13 J	-30064128.51	-30064128.49	-30064128.46	0.0061	0.0061
Venus	-87021-10-17 06:56 J	-30062707.29	-30062707.21	-30062707.10	0.0063	0.0057
Venus	-87020-05-30 11:01 J	-30062482.23	-30062482.04	-30062481.81	0.0063	0.0027
Venus	-87019-01-10 15:49 J	-30062257.07	-30062256.84	-30062256.61	0.0063	0.0004
Venus	-87019-08-23 19:54 J	-30062031.84	-30062031.67	-30062031.47	0.0063	0.0036
Moon	-87009-06-22 04:18 J	-30058441.54	-30058441.32	-30058441.06	0.0067	0.0023
Earth	-87009-06-22 05:59 J	-30058441.50	-30058441.25	-30058440.99	0.0067	0.0022 *

# 87TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 87th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-86936-11-25 22:03 J	-30031621.60	-30031621.58	-30031621.54	0.0085	0.0082		
Mercury	-86935-02-21 23:15 J	-30031533.59	-30031533.53	-30031533.44	0.0085	0.0070		
Mercury	-86935-05-21 00:42 J	-30031445.56	-30031445.47	-30031445.37	0.0084	0.0057		
Mercury	-86935-08-17 01:54 J	-30031357.52	-30031357.42	-30031357.30	0.0084	0.0046		
Mercury	-86935-11-13 03:20 J	-30031269.48	-30031269.36	-30031269.23	0.0084	0.0033		
Mercury	-86934-02-09 04:47 J	-30031181.43	-30031181.30	-30031181.17	0.0084	0.0021		

Mercury -86934-05-08 05:59 J -30031093.38 -30031093.25 -30031093.11 0.0084 0.0009

Mercury -86934-08-04 07:25 J -30031005.33 -30031005.19 -30031005.06 0.0084 0.0004

Mercury -86934-10-31 08:37 J -30030917.27 -30030917.14 -30030917.01 0.0084 0.0015

Mercury -86933-01-27 09:35 J -30030829.22 -30030829.10 -30030828.96 0.0084 0.0027

Mercury -86933-04-24 11:01 J -30030741.15 -30030741.04 -30030740.92 0.0083 0.0038

Mercury -86933-07-21 12:13 J -30030653.09 -30030652.99 -30030652.88 0.0083 0.0049

Mercury -86933-10-17 13:39 J -30030565.02 -30030564.93 -30030564.84 0.0083 0.0061

Mercury -86932-01-13 14:37 J -30030476.95 -30030476.89 -30030476.82 0.0083 0.0072

Venus -86931-12-05 08:23 J -30029786.25 -30029786.15 -30029786.03 0.0082 0.0069

Venus -86930-07-18 18:56 J -30029560.92 -30029560.71 -30029560.49 0.0082 0.0004

Venus -86929-02-29 04:47 J -30029335.43 -30029335.30 -30029335.14 0.0081 0.0060

Earth -86924-12-26 04:32 J -30027208.47 -30027208.31 -30027208.10 0.0078 0.0054

Moon -86924-12-26 08:23 J -30027208.30 -30027208.15 -30027207.96 0.0078 0.0057 \*

Mercury -86783-09-16 10:03 J -29975809.12 -29975809.08 -29975809.00 0.0060 0.0057

Mercury -86783-12-13 11:59 J -29975721.10 -29975721.00 -29975720.90 0.0060 0.0051

Mercury -86782-03-11 13:11 J -29975633.07 -29975632.95 -29975632.81 0.0060 0.0045

Mercury -86782-06-07 14:23 J -29975545.03 -29975544.90 -29975544.73 0.0060 0.0039

Mercury -86782-09-03 16:18 J -29975456.98 -29975456.82 -29975456.66 0.0060 0.0032

Mercury -86782-11-30 17:30 J -29975368.94 -29975368.77 -29975368.58 0.0061 0.0026

Mercury -86781-02-26 18:56 J -29975280.88 -29975280.71 -29975280.51 0.0061 0.0019

Mercury -86781-05-24 20:37 J -29975192.83 -29975192.64 -29975192.45 0.0061 0.0013

Mercury -86781-08-20 22:03 J -29975104.77 -29975104.58 -29975104.38 0.0061 0.0006

Mercury -86781-11-16 23:30 J -29975016.71 -29975016.52 -29975016.32 0.0061 0.0001

Mercury -86780-02-13 00:56 J -29974928.65 -29974928.46 -29974928.26 0.0061 0.0007

Mercury -86780-05-12 02:37 J -29974840.58 -29974840.39 -29974840.20 0.0061 0.0013

Mercury -86780-08-08 03:49 J -29974752.52 -29974752.34 -29974752.15 0.0061 0.0020

Mercury -86780-11-04 05:01 J -29974664.44 -29974664.29 -29974664.09 0.0061 0.0027

Mercury -86779-01-31 06:42 J -29974576.37 -29974576.22 -29974576.04 0.0061 0.0034

Mercury -86779-04-29 08:08 J -29974488.29 -29974488.16 -29974488.00 0.0061 0.0040

Mercury -86779-07-26 10:03 J -29974400.20 -29974400.08 -29974399.95 0.0061 0.0047

Mercury -86779-10-22 11:15 J -29974312.11 -29974312.03 -29974311.92 0.0061 0.0054

Mercury -86778-01-18 12:42 J -29974223.98 -29974223.97 -29974223.92 0.0061 0.0061

Venus -86774-06-28 17:15 J -29972601.96 -29972601.78 -29972601.58 0.0063 0.0034

Venus -86773-02-08 21:35 J -29972376.82 -29972376.60 -29972376.37 0.0063 0.0004

Venus -86773-09-21 02:08 J -29972151.61 -29972151.41 -29972151.20 0.0063 0.0028

Venus -86772-05-04 05:59 J -29971926.30 -29971926.25 -29971926.14 0.0063 0.0060

Earth -86763-06-24 01:39 J -29968588.68 -29968588.43 -29968588.16 0.0067 0.0013

Moon -86763-06-24 05:15 J -29968588.53 -29968588.28 -29968588.01 0.0067 0.0015 \*

Mercury -86689-01-18 12:42 J -29941717.00 -29941716.97 -29941716.94 0.0085 0.0082

Mercury -86689-04-15 13:54 J -29941628.99 -29941628.92 -29941628.84 0.0085 0.0070

Mercury -86689-07-12 15:06 J -29941540.96 -29941540.87 -29941540.76 0.0084 0.0058

Mercury -86689-10-08 16:32 J -29941452.92 -29941452.81 -29941452.70 0.0084 0.0046

Mercury -86688-01-04 17:44 J -29941364.87 -29941364.76 -29941364.63 0.0084 0.0034

Mercury -86688-04-02 19:11 J -29941276.83 -29941276.70 -29941276.57 0.0084 0.0021

Mercury -86688-06-29 20:23 J -29941188.78 -29941188.65 -29941188.51 0.0084 0.0010

Mercury -86688-09-25 21:49 J -29941100.73 -29941100.59 -29941100.46 0.0084 0.0003

Mercury -86688-12-22 23:01 J -29941012.67 -29941012.54 -29941012.41 0.0084 0.0014

Mercury -86687-03-21 00:13 J -29940924.61 -29940924.49 -29940924.36 0.0084 0.0026

Mercury -86687-06-17 01:25 J -29940836.55 -29940836.44 -29940836.32 0.0083 0.0037

Mercury -86687-09-13 02:51 J -29940748.49 -29940748.38 -29940748.28 0.0083 0.0049

Mercury -86687-12-10 03:49 J -29940660.42 -29940660.34 -29940660.24 0.0083 0.0060

Mercury -86686-03-08 05:15 J -29940572.35 -29940572.28 -29940572.22 0.0083 0.0071

Mercury -86686-06-04 06:13 J -29940484.24 -29940484.24 -29940484.22 0.0083 0.0083

Venus -86684-01-02 13:54 J -29939905.92 -29939905.92 -29939905.90 0.0082 0.0082

Venus -86684-08-16 00:27 J -29939680.69 -29939680.48 -29939680.27 0.0082 0.0017

Venus -86683-03-29 10:32 J -29939455.22 -29939455.06 -29939454.87 0.0081 0.0047

Moon -86678-12-27 22:47 J -29937355.60 -29937355.55 -29937355.44 0.0078 0.0074

Earth -86678-12-28 00:27 J -29937355.57 -29937355.48 -29937355.35 0.0078 0.0071 \*

Earth -86677-12-29 00:13 J -29936988.52 -29936988.49 -29936988.42 0.0078 0.0076

Mercury -86537-11-07 23:15 J -29885904.58 -29885904.53 -29885904.45 0.0060 0.0057

Mercury -86536-02-04 00:27 J -29885816.56 -29885816.48 -29885816.35 0.0060 0.0051

Mercury -86536-05-03 01:54 J -29885728.53 -29885728.42 -29885728.26 0.0060 0.0045

Mercury -86536-07-30 03:35 J -29885640.49 -29885640.35 -29885640.19 0.0060 0.0038

Mercury -86536-10-26 05:01 J -29885552.44 -29885552.29 -29885552.11 0.0060 0.0032

Mercury -86535-01-22 06:42 J -29885464.39 -29885464.22 -29885464.04 0.0061 0.0025

Mercury -86535-04-20 08:08 J -29885376.34 -29885376.16 -29885375.97 0.0061 0.0019

Mercury -86535-07-17 09:20 J -29885288.28 -29885288.11 -29885287.90 0.0061 0.0013

Mercury -86535-10-13 11:01 J -29885200.23 -29885200.04 -29885199.84 0.0061 0.0006

Mercury -86534-01-09 12:42 J -29885112.17 -29885111.97 -29885111.78 0.0061 0.0001

Mercury -86534-04-07 14:08 J -29885024.10 -29885023.91 -29885023.72 0.0061 0.0007

Mercury -86534-07-04 15:20 J -29884936.04 -29884935.86 -29884935.66 0.0061 0.0014

Mercury -86534-09-30 17:01 J -29884847.97 -29884847.79 -29884847.60 0.0061 0.0020

Mercury -86534-12-27 18:27 J -29884759.90 -29884759.73 -29884759.55 0.0061 0.0027

Mercury -86533-03-24 19:39 J -29884671.82 -29884671.68 -29884671.50 0.0061 0.0034

Mercury -86533-06-20 21:20 J -29884583.74 -29884583.61 -29884583.45 0.0061 0.0041

Mercury -86533-09-16 22:47 J -29884495.66 -29884495.55 -29884495.41 0.0061 0.0047

Mercury -86533-12-13 23:59 J -29884407.56 -29884407.50 -29884407.38 0.0061 0.0055

Mercury -86532-03-12 01:54 J -29884319.43 -29884319.42 -29884319.38 0.0061 0.0061

Venus -86528-07-26 23:30 J -29882721.69 -29882721.52 -29882721.34 0.0063 0.0040

Venus -86527-03-09 03:49 J -29882496.56 -29882496.34 -29882496.11 0.0063 0.0010

Venus -86527-10-20 08:08 J -29882271.36 -29882271.16 -29882270.94 0.0063 0.0021

Venus -86526-06-02 12:27 J -29882046.09 -29882045.98 -29882045.84 0.0063 0.0053

Mars -86517-03-08 08:37 J -29878844.29 -29878844.14 -29878843.90 0.0067 0.0055

Moon -86517-06-24 21:35 J -29878735.86 -29878735.60 -29878735.31 0.0067 0.0010

Earth -86517-06-24 22:47 J -29878735.81 -29878735.55 -29878735.28 0.0067 0.0007 \*

Mercury -86443-03-12 03:20 J -29851812.39 -29851812.36 -29851812.30 0.0085 0.0080

Mercury -86443-06-08 04:47 J -29851724.37 -29851724.30 -29851724.21 0.0085 0.0068

Mercury -86443-09-04 05:59 J -29851636.34 -29851636.25 -29851636.14 0.0084 0.0056

Mercury -86443-12-01 07:25 J -29851548.30 -29851548.19 -29851548.07 0.0084 0.0043

Mercury -86442-02-27 08:51 J -29851460.25 -29851460.13 -29851460.00 0.0084 0.0031

Mercury -86442-05-26 10:03 J -29851372.20 -29851372.08 -29851371.94 0.0084 0.0019

Mercury -86442-08-22 11:30 J -29851284.15 -29851284.02 -29851283.89 0.0084 0.0007

Mercury -86442-11-18 12:42 J -29851196.10 -29851195.97 -29851195.83 0.0084 0.0005

Mercury -86441-02-14 13:54 J -29851108.05 -29851107.92 -29851107.78 0.0084 0.0017

Mercury -86441-05-12 15:20 J -29851019.99 -29851019.86 -29851019.74 0.0084 0.0028

Mercury -86441-08-08 16:18 J -29850931.93 -29850931.82 -29850931.69 0.0083 0.0040

Mercury -86441-11-04 17:30 J -29850843.86 -29850843.77 -29850843.65 0.0083 0.0051

Mercury -86440-01-31 18:56 J -29850755.79 -29850755.71 -29850755.62 0.0083 0.0062

Mercury -86440-04-29 19:54 J -29850667.72 -29850667.67 -29850667.60 0.0083 0.0074

Venus -86438-09-14 07:39 J -29849800.38 -29849800.18 -29849799.97 0.0082 0.0024

Venus -86437-04-26 17:44 J -29849574.94 -29849574.76 -29849574.56 0.0081 0.0040

Earth -86432-12-28 23:15 J -29847502.53 -29847502.53 -29847502.52 0.0078 0.0078

Earth -86431-12-30 22:32 J -29847135.65 -29847135.56 -29847135.42 0.0078 0.0069

Moon -86431-12-30 23:44 J -29847135.58 -29847135.51 -29847135.38 0.0078 0.0072 \*

Mercury -86291-10-04 12:13 J -29796088.02 -29796087.99 -29796087.94 0.0060 0.0059

Mercury -86291-12-31 13:25 J -29796000.02 -29795999.94 -29795999.83 0.0060 0.0053

Mercury -86290-03-29 14:37 J -29795911.99 -29795911.89 -29795911.74 0.0060 0.0047

Mercury -86290-06-25 16:32 J -29795823.95 -29795823.81 -29795823.66 0.0060 0.0040

Mercury -86290-09-21 17:44 J -29795735.91 -29795735.76 -29795735.58 0.0060 0.0034

Mercury -86290-12-18 19:11 J -29795647.86 -29795647.70 -29795647.51 0.0061 0.0028

Mercury -86289-03-15 20:51 J -29795559.81 -29795559.63 -29795559.44 0.0061 0.0021

Mercury -86289-06-11 22:18 J -29795471.75 -29795471.57 -29795471.37 0.0061 0.0015

Mercury -86289-09-07 23:59 J -29795383.69 -29795383.50 -29795383.31 0.0061 0.0008

Mercury -86289-12-05 01:25 J -29795295.63 -29795295.44 -29795295.24 0.0061 0.0001

Mercury -86288-03-03 02:51 J -29795207.57 -29795207.38 -29795207.18 0.0061 0.0005

Mercury -86288-05-30 04:18 J -29795119.51 -29795119.32 -29795119.12 0.0061 0.0012

Mercury -86288-08-26 05:44 J -29795031.44 -29795031.26 -29795031.07 0.0061 0.0018

Mercury -86288-11-22 06:56 J -29794943.37 -29794943.21 -29794943.01 0.0061 0.0025

Mercury -86287-02-18 08:37 J -29794855.29 -29794855.14 -29794854.96 0.0061 0.0032

Mercury -86287-05-17 10:03 J -29794767.22 -29794767.08 -29794766.91 0.0061 0.0038



Mercury -86287-08-13 11:59 J -29794679.13 -29794679.00 -29794678.87 0.0061 0.0045

Mercury -86287-11-09 13:11 J -29794591.04 -29794590.95 -29794590.83 0.0061 0.0052

Mercury -86286-02-05 14:23 J -29794502.93 -29794502.90 -29794502.81 0.0061 0.0059

Venus -86282-08-25 08:08 J -29792841.31 -29792841.16 -29792840.97 0.0063 0.0040

Venus -86281-04-06 13:11 J -29792616.18 -29792615.95 -29792615.73 0.0063 0.0009

Venus -86281-11-17 17:15 J -29792390.98 -29792390.78 -29792390.56 0.0063 0.0022

Venus -86280-06-30 21:49 J -29792165.71 -29792165.59 -29792165.46 0.0063 0.0053

Moon -86271-06-26 21:35 J -29788882.84 -29788882.60 -29788882.33 0.0067 0.0018

Earth -86271-06-27 00:56 J -29788882.70 -29788882.46 -29788882.18 0.0067 0.0015 \*

Mars -86271-07-30 17:15 J -29788849.12 -29788848.78 -29788848.44 0.0067 0.0001

Mercury -86197-02-05 17:59 J -29761995.75 -29761995.75 -29761995.71 0.0085 0.0084

Mercury -86197-05-03 19:25 J -29761907.75 -29761907.69 -29761907.61 0.0085 0.0071

Mercury -86197-07-30 21:06 J -29761819.72 -29761819.62 -29761819.53 0.0084 0.0059

Mercury -86197-10-26 22:18 J -29761731.68 -29761731.57 -29761731.46 0.0084 0.0047

Mercury -86196-01-22 23:30 J -29761643.64 -29761643.52 -29761643.39 0.0084 0.0035

Mercury -86196-04-21 00:42 J -29761555.59 -29761555.47 -29761555.33 0.0084 0.0024

Mercury -86196-07-18 02:08 J -29761467.54 -29761467.41 -29761467.27 0.0084 0.0011

Mercury -86196-10-14 03:35 J -29761379.49 -29761379.35 -29761379.22 0.0084 0.0003

Mercury -86195-01-10 04:47 J -29761291.43 -29761291.30 -29761291.17 0.0084 0.0013

Mercury -86195-04-08 05:59 J -29761203.38 -29761203.25 -29761203.12 0.0084 0.0024

Mercury -86195-07-05 07:11 J -29761115.32 -29761115.20 -29761115.08 0.0083 0.0036

Mercury -86195-10-01 08:23 J -29761027.25 -29761027.15 -29761027.04 0.0083 0.0047

Mercury -86195-12-28 09:35 J -29760939.19 -29760939.10 -29760939.00 0.0083 0.0059

Mercury -86194-03-26 10:32 J -29760851.11 -29760851.06 -29760850.97 0.0083 0.0070

Mercury -86194-06-22 11:59 J -29760763.02 -29760763.00 -29760762.97 0.0083 0.0081

Venus -86192-10-12 17:59 J -29759919.95 -29759919.75 -29759919.53 0.0082 0.0020

Venus -86191-05-26 04:18 J -29759694.50 -29759694.32 -29759694.13 0.0081 0.0044

Earth -86186-12-31 01:11 J -29757649.53 -29757649.45 -29757649.31 0.0078 0.0070

Moon -86186-12-31 04:32 J -29757649.40 -29757649.31 -29757649.20 0.0078 0.0072 \*

Earth -86184-01-01 01:25 J -29757282.45 -29757282.44 -29757282.39 0.0078 0.0077

Mercury -86045-11-26 02:23 J -29706183.46 -29706183.40 -29706183.30 0.0060 0.0055

Mercury -86044-02-22 03:35 J -29706095.44 -29706095.35 -29706095.21 0.0060 0.0049

Mercury -86044-05-21 05:01 J -29706007.40 -29706007.29 -29706007.13 0.0060 0.0043

Mercury -86044-08-17 06:42 J -29705919.36 -29705919.22 -29705919.05 0.0060 0.0036

Mercury -86044-11-13 08:08 J -29705831.31 -29705831.16 -29705830.98 0.0061 0.0030

Mercury -86043-02-09 09:49 J -29705743.26 -29705743.09 -29705742.91 0.0061 0.0023

Mercury -86043-05-08 11:15 J -29705655.21 -29705655.03 -29705654.84 0.0061 0.0017

Mercury -86043-08-04 12:56 J -29705567.16 -29705566.96 -29705566.77 0.0061 0.0010

Mercury -86043-10-31 14:23 J -29705479.10 -29705478.90 -29705478.71 0.0061 0.0004

Mercury -86042-01-27 15:49 J -29705391.04 -29705390.84 -29705390.65 0.0061 0.0003

Mercury -86042-04-25 17:15 J -29705302.97 -29705302.78 -29705302.59 0.0061 0.0009

Mercury -86042-07-22 18:27 J -29705214.91 -29705214.73 -29705214.53 0.0061 0.0016

Mercury -86042-10-18 20:08 J -29705126.84 -29705126.66 -29705126.47 0.0061 0.0022

Mercury -86041-01-14 21:20 J -29705038.76 -29705038.61 -29705038.42 0.0061 0.0030

Mercury -86041-04-11 23:15 J -29704950.69 -29704950.53 -29704950.37 0.0061 0.0036

Mercury -86041-07-09 00:27 J -29704862.61 -29704862.48 -29704862.33 0.0061 0.0043

Mercury -86041-10-05 01:54 J -29704774.52 -29704774.42 -29704774.29 0.0061 0.0049

Mercury -86040-01-01 03:49 J -29704686.42 -29704686.34 -29704686.26 0.0061 0.0056

Venus -86036-09-22 17:15 J -29702960.93 -29702960.78 -29702960.58 0.0063 0.0040

Venus -86035-05-05 22:03 J -29702735.80 -29702735.58 -29702735.35 0.0063 0.0009

Venus -86035-12-17 02:37 J -29702510.60 -29702510.39 -29702510.17 0.0063 0.0022

Venus -86034-07-30 06:56 J -29702285.32 -29702285.21 -29702285.08 0.0064 0.0053

Earth -86025-06-28 02:37 J -29699029.63 -29699029.39 -29699029.13 0.0067 0.0022

Moon -86025-06-28 04:32 J -29699029.53 -29699029.31 -29699029.05 0.0067 0.0026 \*

Mars -86025-12-21 00:27 J -29698853.64 -29698853.48 -29698853.24 0.0067 0.0054

# 86TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 86th millennium BCE.**

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
	TRANSIT							
	TIME							
Mercury	-85951-03-30 10:18 J	-29672091.13	-29672091.07	-29672091.00	0.0085	0.0074		
Mercury	-85951-06-26 11:30 J	-29672003.10	-29672003.02	-29672002.92	0.0085	0.0062		
Mercury	-85951-09-22 12:56 J	-29671915.06	-29671914.96	-29671914.85	0.0084	0.0049		
Mercury	-85951-12-19 14:23 J	-29671827.02	-29671826.90	-29671826.78	0.0084	0.0037		
Mercury	-85950-03-17 15:35 J	-29671738.97	-29671738.85	-29671738.72	0.0084	0.0025		
Mercury	-85950-06-13 16:47 J	-29671650.92	-29671650.80	-29671650.66	0.0084	0.0014		
Mercury	-85950-09-09 18:13 J	-29671562.87	-29671562.74	-29671562.61	0.0084	0.0002		
Mercury	-85950-12-06 19:25 J	-29671474.82	-29671474.69	-29671474.55	0.0084	0.0010		
Mercury	-85949-03-03 20:51 J	-29671386.76	-29671386.63	-29671386.50	0.0084	0.0022		
Mercury	-85949-05-30 21:49 J	-29671298.70	-29671298.59	-29671298.46	0.0084	0.0034		
Mercury	-85949-08-26 23:15 J	-29671210.64	-29671210.53	-29671210.42	0.0083	0.0045		
Mercury	-85949-11-23 00:13 J	-29671122.57	-29671122.49	-29671122.38	0.0083	0.0057		
Mercury	-85948-02-19 01:39 J	-29671034.50	-29671034.43	-29671034.35	0.0083	0.0067		
Mercury	-85948-05-18 03:06 J	-29670946.41	-29670946.37	-29670946.33	0.0083	0.0078		
Venus	-85946-03-30 18:56 J	-29670264.78	-29670264.71	-29670264.63	0.0082	0.0076		
Venus	-85946-11-11 05:15 J	-29670039.49	-29670039.28	-29670039.06	0.0082	0.0013		
Venus	-85945-06-23 15:20 J	-29669814.02	-29669813.86	-29669813.68	0.0081	0.0051		
Earth	-85939-01-01 04:47 J	-29667796.44	-29667796.30	-29667796.10	0.0078	0.0058		
Moon	-85939-01-01 05:44 J	-29667796.42	-29667796.26	-29667796.06	0.0078	0.0058	*	
Mars	-85939-06-11 20:51 J	-29667634.84	-29667634.63	-29667634.36	0.0078	0.0045		
Mercury	-85799-07-26 15:06 J	-29616454.87	-29616454.87	-29616454.85	0.0060	0.0060		
Mercury	-85799-10-22 16:04 J	-29616366.89	-29616366.83	-29616366.72	0.0060	0.0055		

Mercury -85798-01-18 17:59 J -29616278.86 -29616278.75 -29616278.63 0.0060 0.0048

Mercury -85798-04-16 19:11 J -29616190.82 -29616190.70 -29616190.54 0.0060 0.0042

Mercury -85798-07-13 20:37 J -29616102.78 -29616102.64 -29616102.47 0.0061 0.0036

Mercury -85798-10-09 22:18 J -29616014.73 -29616014.57 -29616014.39 0.0061 0.0029

Mercury -85797-01-05 23:30 J -29615926.68 -29615926.52 -29615926.32 0.0061 0.0023

Mercury -85797-04-03 00:56 J -29615838.63 -29615838.46 -29615838.26 0.0061 0.0017

Mercury -85797-06-30 02:37 J -29615750.58 -29615750.39 -29615750.19 0.0061 0.0010

Mercury -85797-09-26 04:04 J -29615662.52 -29615662.33 -29615662.13 0.0061 0.0004

Mercury -85797-12-23 05:44 J -29615574.46 -29615574.26 -29615574.07 0.0061 0.0003

Mercury -85796-03-21 06:56 J -29615486.39 -29615486.21 -29615486.01 0.0061 0.0010

Mercury -85796-06-17 08:37 J -29615398.33 -29615398.14 -29615397.95 0.0061 0.0016

Mercury -85796-09-13 09:49 J -29615310.26 -29615310.09 -29615309.90 0.0061 0.0023

Mercury -85796-12-10 11:30 J -29615222.18 -29615222.02 -29615221.84 0.0061 0.0029

Mercury -85795-03-08 12:42 J -29615134.11 -29615133.97 -29615133.79 0.0061 0.0037

Mercury -85795-06-04 14:37 J -29615046.03 -29615045.89 -29615045.75 0.0061 0.0043

Mercury -85795-08-31 15:49 J -29614957.94 -29614957.84 -29614957.71 0.0061 0.0050

Mercury -85795-11-27 17:01 J -29614869.84 -29614869.79 -29614869.69 0.0061 0.0057

Venus -85790-10-22 04:18 J -29613080.50 -29613080.32 -29613080.12 0.0063 0.0034

Venus -85789-06-03 08:52 J -29612855.35 -29612855.13 -29612854.90 0.0063 0.0004

Venus -85788-01-14 12:56 J -29612630.14 -29612629.96 -29612629.73 0.0063 0.0028

Venus -85788-08-27 17:30 J -29612404.83 -29612404.77 -29612404.66 0.0064 0.0059

Moon -85780-06-28 12:13 J -29609543.06 -29609542.99 -29609542.84 0.0067 0.0061

Earth -85780-06-28 15:35 J -29609542.96 -29609542.85 -29609542.69 0.0067 0.0057 \*

Earth -85779-06-30 08:08 J -29609176.37 -29609176.16 -29609175.95 0.0067 0.0040

Moon -85779-06-30 09:49 J -29609176.27 -29609176.09 -29609175.86 0.0067 0.0044 \*

Mercury -85706-11-28 00:28 J -29582362.48 -29582362.48 -29582362.45 0.0085 0.0084

Mercury -85705-02-24 01:54 J -29582274.48 -29582274.42 -29582274.34 0.0085 0.0072

Mercury -85705-05-22 03:06 J -29582186.45 -29582186.37 -29582186.26 0.0084 0.0060

Mercury -85705-08-18 04:32 J -29582098.41 -29582098.31 -29582098.19 0.0084 0.0047

Mercury -85705-11-14 05:59 J -29582010.37 -29582010.25 -29582010.13 0.0084 0.0035

Mercury -85704-02-10 07:11 J -29581922.32 -29581922.20 -29581922.07 0.0084 0.0024

Mercury -85704-05-09 08:37 J -29581834.27 -29581834.14 -29581834.01 0.0084 0.0011

Mercury -85704-08-05 09:49 J -29581746.22 -29581746.09 -29581745.95 0.0084 0.0002

Mercury -85704-11-01 11:01 J -29581658.17 -29581658.04 -29581657.90 0.0084 0.0013

Mercury -85703-01-28 12:28 J -29581570.11 -29581569.98 -29581569.85 0.0084 0.0024

Mercury -85703-04-26 13:25 J -29581482.05 -29581481.94 -29581481.81 0.0083 0.0036

Mercury -85703-07-23 14:52 J -29581393.99 -29581393.88 -29581393.77 0.0083 0.0047

Mercury -85703-10-19 15:49 J -29581305.92 -29581305.84 -29581305.73 0.0083 0.0059

Mercury -85702-01-15 17:16 J -29581217.85 -29581217.78 -29581217.70 0.0083 0.0069

Mercury -85702-04-13 18:28 J -29581129.75 -29581129.73 -29581129.69 0.0083 0.0080

Venus -85700-04-28 08:23 J -29580384.27 -29580384.15 -29580383.98 0.0082 0.0060

Venus -85700-12-09 19:11 J -29580158.91 -29580158.70 -29580158.48 0.0081 0.0004

Venus -85699-07-23 05:01 J -29579933.39 -29579933.29 -29579933.15 0.0081 0.0066

Moon -85693-01-03 09:06 J -29577943.34 -29577943.12 -29577942.87 0.0078 0.0030

Earth -85693-01-03 13:11 J -29577943.18 -29577942.95 -29577942.72 0.0078 0.0031 \*

Mars -85693-11-03 02:23 J -29577638.57 -29577638.40 -29577638.18 0.0078 0.0058

Mercury -85553-09-17 05:30 J -29526550.33 -29526550.27 -29526550.17 0.0060 0.0055

Mercury -85553-12-14 06:56 J -29526462.31 -29526462.21 -29526462.08 0.0060 0.0049

Mercury -85552-03-12 08:08 J -29526374.27 -29526374.16 -29526374.00 0.0060 0.0043

Mercury -85552-06-08 10:04 J -29526286.23 -29526286.08 -29526285.92 0.0060 0.0036

Mercury -85552-09-04 11:16 J -29526198.18 -29526198.03 -29526197.85 0.0061 0.0030

Mercury -85552-12-01 12:42 J -29526110.13 -29526109.97 -29526109.77 0.0061 0.0024

Mercury -85551-02-27 14:23 J -29526022.08 -29526021.90 -29526021.71 0.0061 0.0017

Mercury -85551-05-26 15:49 J -29525934.02 -29525933.84 -29525933.64 0.0061 0.0011

Mercury -85551-08-22 17:30 J -29525845.97 -29525845.77 -29525845.58 0.0061 0.0004

Mercury -85551-11-18 18:56 J -29525757.90 -29525757.71 -29525757.51 0.0061 0.0002

Mercury -85550-02-14 20:23 J -29525669.84 -29525669.65 -29525669.45 0.0061 0.0009

Mercury -85550-05-13 21:49 J -29525581.77 -29525581.59 -29525581.40 0.0061 0.0015

Mercury -85550-08-09 23:01 J -29525493.70 -29525493.54 -29525493.34 0.0061 0.0022

Mercury -85550-11-06 00:42 J -29525405.63 -29525405.47 -29525405.29 0.0061 0.0029

Mercury -85549-02-02 01:54 J -29525317.56 -29525317.42 -29525317.24 0.0061 0.0036

Mercury -85549-04-30 03:49 J -29525229.48 -29525229.34 -29525229.19 0.0061 0.0042

Mercury -85549-07-27 05:01 J -29525141.39 -29525141.29 -29525141.15 0.0061 0.0049

Mercury -85549-10-23 06:28 J -29525053.29 -29525053.23 -29525053.12 0.0061 0.0056

Venus -85544-04-08 09:49 J -29523425.11 -29523425.09 -29523425.05 0.0063 0.0062

Venus -85544-11-19 13:54 J -29523200.10 -29523199.92 -29523199.71 0.0063 0.0032

Venus -85543-07-02 18:42 J -29522974.95 -29522974.72 -29522974.49 0.0063 0.0002

Venus -85542-02-12 22:47 J -29522749.73 -29522749.55 -29522749.33 0.0063 0.0030

Venus -85542-09-26 03:20 J -29522524.40 -29522524.36 -29522524.27 0.0064 0.0061

Earth -85534-06-30 19:25 J -29519689.89 -29519689.69 -29519689.50 0.0067 0.0045

Moon -85534-06-30 21:20 J -29519689.76 -29519689.61 -29519689.41 0.0067 0.0049 \*

Moon -85533-07-01 07:25 J -29519323.32 -29519323.19 -29519323.01 0.0067 0.0055

Earth -85533-07-01 11:16 J -29519323.19 -29519323.03 -29519322.86 0.0067 0.0052 \*

Mercury -85460-10-23 15:49 J -29492545.84 -29492545.84 -29492545.83 0.0085 0.0084

Mercury -85459-01-19 17:01 J -29492457.85 -29492457.79 -29492457.71 0.0085 0.0072

Mercury -85459-04-17 18:13 J -29492369.82 -29492369.74 -29492369.63 0.0085 0.0061

Mercury -85459-07-14 19:40 J -29492281.78 -29492281.68 -29492281.56 0.0084 0.0048

Mercury -85459-10-10 21:06 J -29492193.74 -29492193.62 -29492193.50 0.0084 0.0036

Mercury -85458-01-06 22:18 J -29492105.69 -29492105.57 -29492105.43 0.0084 0.0025

Mercury -85458-04-04 23:44 J -29492017.64 -29492017.51 -29492017.38 0.0084 0.0012

Mercury -85458-07-02 01:11 J -29491929.59 -29491929.45 -29491929.32 0.0084 0.0003

Mercury -85458-09-28 02:23 J -29491841.53 -29491841.40 -29491841.27 0.0084 0.0011

Mercury -85458-12-25 03:35 J -29491753.48 -29491753.35 -29491753.22 0.0084 0.0023

Mercury -85457-03-22 04:47 J -29491665.42 -29491665.30 -29491665.18 0.0084 0.0034

Mercury -85457-06-18 05:59 J -29491577.36 -29491577.25 -29491577.13 0.0083 0.0046

Mercury -85457-09-14 07:11 J -29491489.29 -29491489.20 -29491489.10 0.0083 0.0057

Mercury -85457-12-11 08:23 J -29491401.22 -29491401.15 -29491401.07 0.0083 0.0068

Mercury -85456-03-09 09:49 J -29491313.13 -29491313.09 -29491313.06 0.0083 0.0079

Venus -85454-05-27 20:23 J -29490503.80 -29490503.65 -29490503.45 0.0082 0.0049

Venus -85453-01-08 07:11 J -29490278.41 -29490278.20 -29490277.99 0.0081 0.0015

Venus -85453-08-20 17:16 J -29490052.84 -29490052.78 -29490052.71 0.0081 0.0077  
 Earth -85447-01-04 18:13 J -29488089.98 -29488089.74 -29488089.48 0.0078 0.0011  
 Moon -85447-01-04 18:42 J -29488089.96 -29488089.72 -29488089.47 0.0078 0.0010 \*  
 Mercury -85307-08-13 18:56 J -29436733.76 -29436733.71 -29436733.60 0.0060 0.0055  
 Mercury -85307-11-09 20:23 J -29436645.74 -29436645.65 -29436645.51 0.0060 0.0049  
 Mercury -85306-02-05 22:18 J -29436557.70 -29436557.57 -29436557.42 0.0060 0.0042  
 Mercury -85306-05-04 23:30 J -29436469.66 -29436469.52 -29436469.35 0.0061 0.0036  
 Mercury -85306-08-01 00:56 J -29436381.61 -29436381.46 -29436381.27 0.0061 0.0030  
 Mercury -85306-10-28 02:37 J -29436293.56 -29436293.39 -29436293.20 0.0061 0.0023  
 Mercury -85305-01-24 04:04 J -29436205.51 -29436205.33 -29436205.14 0.0061 0.0017  
 Mercury -85305-04-21 05:44 J -29436117.45 -29436117.26 -29436117.07 0.0061 0.0010  
 Mercury -85305-07-18 07:11 J -29436029.39 -29436029.20 -29436029.01 0.0061 0.0004  
 Mercury -85305-10-14 08:37 J -29435941.33 -29435941.14 -29435940.94 0.0061 0.0003  
 Mercury -85304-01-10 10:04 J -29435853.27 -29435853.08 -29435852.88 0.0061 0.0009  
 Mercury -85304-04-08 11:16 J -29435765.20 -29435765.03 -29435764.83 0.0061 0.0016  
 Mercury -85304-07-05 12:56 J -29435677.13 -29435676.96 -29435676.77 0.0061 0.0022  
 Mercury -85304-10-01 14:08 J -29435589.06 -29435588.91 -29435588.72 0.0061 0.0029  
 Mercury -85304-12-28 15:49 J -29435500.99 -29435500.84 -29435500.67 0.0061 0.0036  
 Mercury -85303-03-26 17:01 J -29435412.91 -29435412.79 -29435412.62 0.0061 0.0043  
 Mercury -85303-06-22 18:56 J -29435324.82 -29435324.71 -29435324.58 0.0061 0.0049  
 Mercury -85303-09-18 20:08 J -29435236.72 -29435236.66 -29435236.56 0.0061 0.0056  
 Venus -85298-05-07 20:08 J -29433544.72 -29433544.66 -29433544.55 0.0063 0.0058  
 Venus -85298-12-19 00:28 J -29433319.66 -29433319.48 -29433319.25 0.0063 0.0029  
 Venus -85297-07-31 05:16 J -29433094.50 -29433094.28 -29433094.05 0.0063 0.0003  
 Venus -85296-03-13 09:49 J -29432869.28 -29432869.09 -29432868.89 0.0064 0.0034  
 Earth -85288-07-01 23:30 J -29429836.75 -29429836.52 -29429836.27 0.0067 0.0029  
 Moon -85288-07-02 01:40 J -29429836.65 -29429836.43 -29429836.16 0.0067 0.0032 \*  
 Mars -85287-04-05 09:35 J -29429559.40 -29429559.10 -29429558.76 0.0067 0.0023  
 Mercury -85214-09-19 06:56 J -29402729.22 -29402729.21 -29402729.18 0.0085 0.0084  
 Mercury -85214-12-16 08:37 J -29402641.21 -29402641.14 -29402641.07 0.0085 0.0071

Mercury -85213-03-13 09:35 J -29402553.18 -29402553.10 -29402552.99 0.0084 0.0060

Mercury -85213-06-09 11:01 J -29402465.14 -29402465.04 -29402464.92 0.0084 0.0047

Mercury -85213-09-05 12:28 J -29402377.10 -29402376.98 -29402376.85 0.0084 0.0035

Mercury -85213-12-02 13:40 J -29402289.05 -29402288.93 -29402288.79 0.0084 0.0024

Mercury -85212-02-28 15:06 J -29402201.00 -29402200.87 -29402200.74 0.0084 0.0011

Mercury -85212-05-27 16:18 J -29402112.95 -29402112.82 -29402112.68 0.0084 0.0003

Mercury -85212-08-23 17:44 J -29402024.89 -29402024.76 -29402024.63 0.0084 0.0012

Mercury -85212-11-19 18:56 J -29401936.84 -29401936.71 -29401936.58 0.0084 0.0024

Mercury -85211-02-15 20:08 J -29401848.78 -29401848.66 -29401848.54 0.0083 0.0035

Mercury -85211-05-14 21:20 J -29401760.71 -29401760.61 -29401760.49 0.0083 0.0047

Mercury -85211-08-10 22:32 J -29401672.65 -29401672.56 -29401672.46 0.0083 0.0058

Mercury -85211-11-06 23:44 J -29401584.57 -29401584.51 -29401584.43 0.0083 0.0069

Mercury -85210-02-03 00:56 J -29401496.48 -29401496.46 -29401496.42 0.0083 0.0080

Venus -85208-06-25 09:35 J -29400623.28 -29400623.10 -29400622.89 0.0082 0.0035

Venus -85207-02-05 19:40 J -29400397.86 -29400397.68 -29400397.46 0.0081 0.0029

Earth -85201-01-07 00:28 J -29398236.72 -29398236.48 -29398236.22 0.0078 0.0013

Moon -85201-01-07 04:04 J -29398236.57 -29398236.33 -29398236.07 0.0078 0.0015 \*

Mercury -85061-07-09 08:23 J -29346917.20 -29346917.15 -29346917.05 0.0060 0.0056

Mercury -85061-10-05 09:35 J -29346829.18 -29346829.10 -29346828.96 0.0060 0.0050

Mercury -85060-01-01 11:30 J -29346741.15 -29346741.02 -29346740.88 0.0060 0.0043

Mercury -85060-03-30 12:42 J -29346653.11 -29346652.97 -29346652.80 0.0060 0.0037

Mercury -85060-06-26 14:08 J -29346565.06 -29346564.91 -29346564.73 0.0061 0.0031

Mercury -85060-09-22 16:04 J -29346477.01 -29346476.83 -29346476.66 0.0061 0.0024

Mercury -85060-12-19 17:16 J -29346388.96 -29346388.78 -29346388.59 0.0061 0.0018

Mercury -85059-03-17 18:42 J -29346300.90 -29346300.72 -29346300.52 0.0061 0.0012

Mercury -85059-06-13 20:23 J -29346212.85 -29346212.65 -29346212.46 0.0061 0.0005

Mercury -85059-09-09 21:49 J -29346124.79 -29346124.59 -29346124.40 0.0061 0.0002

Mercury -85059-12-06 23:01 J -29346036.72 -29346036.54 -29346036.34 0.0061 0.0008

Mercury -85058-03-05 00:42 J -29345948.66 -29345948.47 -29345948.28 0.0061 0.0014

Mercury -85058-06-01 01:54 J -29345860.59 -29345860.42 -29345860.23 0.0061 0.0021



Mercury	-85058-08-28 03:35 J	-29345772.52	-29345772.35	-29345772.17	0.0061	0.0027
Mercury	-85058-11-24 04:47 J	-29345684.45	-29345684.30	-29345684.12	0.0061	0.0034
Mercury	-85057-02-20 06:42 J	-29345596.37	-29345596.22	-29345596.08	0.0061	0.0041
Mercury	-85057-05-18 07:40 J	-29345508.28	-29345508.18	-29345508.04	0.0061	0.0048
Mercury	-85057-08-14 09:06 J	-29345420.19	-29345420.12	-29345420.01	0.0061	0.0055
Mercury	-85057-11-10 11:01 J	-29345332.06	-29345332.04	-29345332.01	0.0061	0.0061
Venus	-85052-06-05 05:59 J	-29343664.35	-29343664.25	-29343664.15	0.0063	0.0056
Venus	-85051-01-16 10:04 J	-29343439.28	-29343439.08	-29343438.86	0.0063	0.0026
Venus	-85051-08-29 14:37 J	-29343214.11	-29343213.89	-29343213.66	0.0063	0.0004
Venus	-85050-04-11 19:25 J	-29342988.88	-29342988.69	-29342988.50	0.0064	0.0035
Moon	-85042-07-03 22:18 J	-29339983.81	-29339983.57	-29339983.30	0.0067	0.0021
Earth	-85042-07-04 01:40 J	-29339983.67	-29339983.43	-29339983.16	0.0067	0.0019 *
Mars	-85041-08-26 17:30 J	-29339564.03	-29339563.77	-29339563.47	0.0067	0.0037

# 85TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 85th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-84968-11-10 23:01 J	-29312824.59	-29312824.54	-29312824.48	0.0085	0.0075		
Mercury	-84967-02-07 00:28 J	-29312736.57	-29312736.48	-29312736.39	0.0085	0.0063		
Mercury	-84967-05-06 01:40 J	-29312648.53	-29312648.43	-29312648.32	0.0084	0.0051		
Mercury	-84967-08-02 03:06 J	-29312560.49	-29312560.37	-29312560.25	0.0084	0.0039		
Mercury	-84967-10-29 04:18 J	-29312472.44	-29312472.32	-29312472.19	0.0084	0.0027		

Mercury -84966-01-25 05:44 J -29312384.39 -29312384.26 -29312384.13 0.0084 0.0015  
 Mercury -84966-04-23 06:56 J -29312296.34 -29312296.21 -29312296.07 0.0084 0.0004  
 Mercury -84966-07-20 08:23 J -29312208.29 -29312208.15 -29312208.02 0.0084 0.0009  
 Mercury -84966-10-16 09:35 J -29312120.23 -29312120.10 -29312119.97 0.0084 0.0020  
 Mercury -84965-01-12 10:47 J -29312032.17 -29312032.05 -29312031.92 0.0084 0.0032  
 Mercury -84965-04-09 12:13 J -29311944.11 -29311943.99 -29311943.88 0.0083 0.0043  
 Mercury -84965-07-06 13:11 J -29311856.04 -29311855.95 -29311855.84 0.0083 0.0054  
 Mercury -84965-10-02 14:37 J -29311767.97 -29311767.89 -29311767.81 0.0083 0.0065  
 Mercury -84965-12-29 15:35 J -29311679.89 -29311679.85 -29311679.79 0.0083 0.0077  
 Venus -84962-07-24 20:23 J -29310742.84 -29310742.65 -29310742.44 0.0082 0.0031  
 Venus -84961-03-06 06:28 J -29310517.41 -29310517.23 -29310517.02 0.0081 0.0032  
 Moon -84955-01-08 01:11 J -29308383.68 -29308383.45 -29308383.19 0.0078 0.0027  
 Earth -84955-01-08 03:06 J -29308383.60 -29308383.37 -29308383.12 0.0078 0.0024 \*  
 Mars -84955-02-17 08:08 J -29308343.35 -29308343.16 -29308342.94 0.0078 0.0055  
 Mercury -84815-03-08 21:06 J -29257188.63 -29257188.62 -29257188.56 0.0060 0.0060  
 Mercury -84815-06-04 22:32 J -29257100.62 -29257100.56 -29257100.45 0.0060 0.0054  
 Mercury -84815-08-31 23:59 J -29257012.60 -29257012.50 -29257012.36 0.0060 0.0048  
 Mercury -84815-11-28 01:54 J -29256924.56 -29256924.42 -29256924.28 0.0060 0.0041  
 Mercury -84814-02-24 03:06 J -29256836.52 -29256836.37 -29256836.20 0.0061 0.0035  
 Mercury -84814-05-23 04:32 J -29256748.47 -29256748.31 -29256748.13 0.0061 0.0029  
 Mercury -84814-08-19 06:13 J -29256660.42 -29256660.24 -29256660.06 0.0061 0.0022  
 Mercury -84814-11-15 07:40 J -29256572.36 -29256572.18 -29256571.99 0.0061 0.0016  
 Mercury -84813-02-11 09:06 J -29256484.31 -29256484.12 -29256483.92 0.0061 0.0009  
 Mercury -84813-05-09 10:32 J -29256396.25 -29256396.06 -29256395.86 0.0061 0.0003  
 Mercury -84813-08-05 11:59 J -29256308.19 -29256308.00 -29256307.80 0.0061 0.0004  
 Mercury -84813-11-01 13:25 J -29256220.13 -29256219.94 -29256219.74 0.0061 0.0010  
 Mercury -84812-01-28 14:52 J -29256132.06 -29256131.88 -29256131.68 0.0061 0.0016  
 Mercury -84812-04-26 16:18 J -29256043.99 -29256043.82 -29256043.63 0.0061 0.0023  
 Mercury -84812-07-23 17:44 J -29255955.92 -29255955.76 -29255955.58 0.0061 0.0030  
 Mercury -84812-10-19 18:56 J -29255867.84 -29255867.71 -29255867.53 0.0061 0.0037

Mercury -84811-01-15 20:52 J -29255779.76 -29255779.63 -29255779.49 0.0061 0.0043

Mercury -84811-04-13 22:04 J -29255691.68 -29255691.58 -29255691.45 0.0061 0.0050

Mercury -84811-07-10 23:59 J -29255603.58 -29255603.50 -29255603.42 0.0061 0.0056

Venus -84806-07-04 17:16 J -29253783.90 -29253783.78 -29253783.62 0.0063 0.0049

Venus -84805-02-14 21:49 J -29253558.79 -29253558.59 -29253558.36 0.0063 0.0019

Venus -84805-09-27 02:37 J -29253333.61 -29253333.39 -29253333.16 0.0063 0.0012

Venus -84804-05-10 06:56 J -29253108.36 -29253108.21 -29253108.02 0.0064 0.0043

Moon -84796-07-05 07:54 J -29250130.42 -29250130.17 -29250129.91 0.0067 0.0004

Earth -84796-07-05 08:52 J -29250130.39 -29250130.13 -29250129.86 0.0067 0.0005 \*

Mercury -84722-07-11 13:40 J -29223095.94 -29223095.93 -29223095.92 0.0085 0.0084

Mercury -84722-10-07 14:52 J -29223007.94 -29223007.88 -29223007.81 0.0085 0.0072

Mercury -84721-01-03 16:18 J -29222919.91 -29222919.82 -29222919.73 0.0085 0.0060

Mercury -84721-03-31 17:16 J -29222831.87 -29222831.78 -29222831.66 0.0084 0.0049

Mercury -84721-06-27 18:42 J -29222743.83 -29222743.72 -29222743.59 0.0084 0.0036

Mercury -84721-09-23 20:08 J -29222655.78 -29222655.66 -29222655.53 0.0084 0.0024

Mercury -84721-12-20 21:35 J -29222567.73 -29222567.60 -29222567.47 0.0084 0.0012

Mercury -84720-03-18 22:47 J -29222479.68 -29222479.55 -29222479.42 0.0084 0.0001

Mercury -84720-06-14 23:59 J -29222391.63 -29222391.50 -29222391.36 0.0084 0.0012

Mercury -84720-09-11 01:25 J -29222303.57 -29222303.44 -29222303.31 0.0084 0.0023

Mercury -84720-12-08 02:23 J -29222215.51 -29222215.40 -29222215.27 0.0084 0.0035

Mercury -84719-03-06 03:49 J -29222127.45 -29222127.34 -29222127.23 0.0083 0.0046

Mercury -84719-06-02 04:47 J -29222039.38 -29222039.30 -29222039.19 0.0083 0.0057

Mercury -84719-08-29 06:13 J -29221951.31 -29221951.24 -29221951.16 0.0083 0.0068

Mercury -84719-11-25 07:25 J -29221863.22 -29221863.19 -29221863.15 0.0083 0.0079

Venus -84716-01-09 00:13 J -29221087.56 -29221087.49 -29221087.41 0.0082 0.0076

Venus -84716-08-22 10:32 J -29220862.26 -29220862.06 -29220861.84 0.0081 0.0014

Venus -84715-04-04 20:37 J -29220636.80 -29220636.64 -29220636.46 0.0081 0.0049

Moon -84709-01-10 08:37 J -29218530.28 -29218530.14 -29218529.95 0.0078 0.0058

Earth -84709-01-10 11:16 J -29218530.20 -29218530.03 -29218529.84 0.0078 0.0054 \*

Mars -84709-07-11 13:11 J -29218347.14 -29218346.95 -29218346.71 0.0078 0.0053

Mercury -84569-02-02 11:30 J -29167372.06 -29167372.02 -29167371.95 0.0060 0.0058

Mercury -84569-04-30 12:56 J -29167284.04 -29167283.96 -29167283.84 0.0060 0.0052

Mercury -84569-07-27 14:23 J -29167196.01 -29167195.90 -29167195.76 0.0060 0.0045

Mercury -84569-10-23 15:35 J -29167107.97 -29167107.85 -29167107.68 0.0060 0.0040

Mercury -84568-01-19 17:30 J -29167019.93 -29167019.77 -29167019.60 0.0061 0.0033

Mercury -84568-04-17 18:42 J -29166931.88 -29166931.72 -29166931.53 0.0061 0.0027

Mercury -84568-07-14 20:08 J -29166843.83 -29166843.66 -29166843.46 0.0061 0.0021

Mercury -84568-10-10 21:49 J -29166755.77 -29166755.59 -29166755.40 0.0061 0.0014

Mercury -84567-01-06 23:16 J -29166667.72 -29166667.53 -29166667.33 0.0061 0.0008

Mercury -84567-04-05 00:56 J -29166579.66 -29166579.46 -29166579.27 0.0061 0.0002

Mercury -84567-07-02 02:23 J -29166491.60 -29166491.40 -29166491.21 0.0061 0.0005

Mercury -84567-09-28 03:49 J -29166403.53 -29166403.34 -29166403.15 0.0061 0.0011

Mercury -84567-12-25 05:01 J -29166315.46 -29166315.29 -29166315.09 0.0061 0.0018

Mercury -84566-03-23 06:42 J -29166227.39 -29166227.22 -29166227.04 0.0061 0.0024

Mercury -84566-06-19 07:54 J -29166139.32 -29166139.17 -29166138.99 0.0061 0.0031

Mercury -84566-09-15 09:35 J -29166051.24 -29166051.10 -29166050.94 0.0061 0.0038

Mercury -84566-12-12 10:47 J -29165963.16 -29165963.05 -29165962.90 0.0061 0.0045

Mercury -84565-03-09 12:42 J -29165875.07 -29165874.97 -29165874.86 0.0061 0.0051

Mercury -84565-06-05 13:54 J -29165786.97 -29165786.92 -29165786.84 0.0061 0.0058

Venus -84560-08-02 04:47 J -29163903.44 -29163903.30 -29163903.11 0.0063 0.0043

Venus -84559-03-15 09:49 J -29163678.31 -29163678.09 -29163677.87 0.0063 0.0013

Venus -84559-10-26 13:54 J -29163453.12 -29163452.92 -29163452.68 0.0063 0.0019

Venus -84558-06-08 18:42 J -29163227.85 -29163227.72 -29163227.57 0.0064 0.0049

Earth -84550-07-07 15:20 J -29160277.09 -29160276.86 -29160276.60 0.0067 0.0028

Moon -84550-07-07 18:42 J -29160276.94 -29160276.72 -29160276.45 0.0067 0.0028 \*

Mercury -84476-06-06 05:16 J -29133279.31 -29133279.28 -29133279.24 0.0085 0.0081

Mercury -84476-09-02 06:42 J -29133191.29 -29133191.22 -29133191.14 0.0085 0.0069

Mercury -84476-11-29 08:08 J -29133103.26 -29133103.16 -29133103.06 0.0084 0.0057

Mercury -84475-02-25 09:20 J -29133015.22 -29133015.11 -29133014.99 0.0084 0.0045

Mercury -84475-05-24 10:32 J -29132927.17 -29132927.06 -29132926.93 0.0084 0.0033

Mercury -84475-08-20 11:59 J -29132839.13 -29132839.00 -29132838.87 0.0084 0.0021

Mercury -84475-11-16 13:25 J -29132751.08 -29132750.94 -29132750.81 0.0084 0.0009

Mercury -84474-02-12 14:37 J -29132663.02 -29132662.89 -29132662.76 0.0084 0.0002

Mercury -84474-05-11 15:49 J -29132574.97 -29132574.84 -29132574.70 0.0084 0.0014

Mercury -84474-08-07 17:01 J -29132486.91 -29132486.79 -29132486.66 0.0084 0.0026

Mercury -84474-11-03 18:28 J -29132398.85 -29132398.73 -29132398.61 0.0083 0.0037

Mercury -84473-01-30 19:25 J -29132310.79 -29132310.69 -29132310.57 0.0083 0.0049

Mercury -84473-04-27 20:52 J -29132222.72 -29132222.63 -29132222.53 0.0083 0.0060

Mercury -84473-07-24 21:49 J -29132134.64 -29132134.59 -29132134.51 0.0083 0.0071

Mercury -84473-10-20 23:01 J -29132046.54 -29132046.54 -29132046.50 0.0083 0.0082

Venus -84470-02-07 14:08 J -29131207.03 -29131206.91 -29131206.74 0.0082 0.0059

Venus -84470-09-21 00:56 J -29130981.67 -29130981.46 -29130981.24 0.0081 0.0005

Venus -84469-05-03 10:47 J -29130756.16 -29130756.05 -29130755.90 0.0081 0.0065

Moon -84464-01-09 18:28 J -29129043.85 -29129043.73 -29129043.61 0.0078 0.0069

Earth -84464-01-09 19:40 J -29129043.79 -29129043.68 -29129043.51 0.0078 0.0065 \*

Mercury -84324-10-02 01:40 J -29077643.45 -29077643.43 -29077643.41 0.0060 0.0060

Mercury -84324-12-29 02:52 J -29077555.46 -29077555.38 -29077555.29 0.0060 0.0054

Mercury -84323-03-27 04:04 J -29077467.43 -29077467.33 -29077467.20 0.0060 0.0048

Mercury -84323-06-23 05:16 J -29077379.40 -29077379.28 -29077379.12 0.0060 0.0042

Mercury -84323-09-19 06:42 J -29077291.35 -29077291.22 -29077291.04 0.0061 0.0036

Mercury -84323-12-16 08:37 J -29077203.31 -29077203.14 -29077202.97 0.0061 0.0029

Mercury -84322-03-14 09:49 J -29077115.26 -29077115.09 -29077114.90 0.0061 0.0023

Mercury -84322-06-10 11:16 J -29077027.21 -29077027.03 -29077026.83 0.0061 0.0017

Mercury -84322-09-06 12:56 J -29076939.15 -29076938.96 -29076938.77 0.0061 0.0010

Mercury -84322-12-03 14:23 J -29076851.09 -29076850.90 -29076850.70 0.0061 0.0004

Mercury -84321-02-29 15:49 J -29076763.03 -29076762.84 -29076762.64 0.0061 0.0003

Mercury -84321-05-27 17:16 J -29076674.97 -29076674.78 -29076674.58 0.0061 0.0009

Mercury -84321-08-23 18:28 J -29076586.90 -29076586.73 -29076586.53 0.0061 0.0016

Mercury -84321-11-19 20:08 J -29076498.83 -29076498.66 -29076498.47 0.0061 0.0022

Mercury -84320-02-15 21:49 J -29076410.76 -29076410.59 -29076410.42 0.0061 0.0029

Mercury -84320-05-14 23:01 J -29076322.69 -29076322.54 -29076322.37 0.0061 0.0035

Mercury -84320-08-11 00:42 J -29076234.61 -29076234.47 -29076234.32 0.0061 0.0042

Mercury -84320-11-07 01:54 J -29076146.52 -29076146.42 -29076146.28 0.0061 0.0049

Mercury -84319-02-03 03:06 J -29076058.42 -29076058.37 -29076058.25 0.0061 0.0056

Venus -84314-01-18 13:40 J -29074247.94 -29074247.93 -29074247.85 0.0063 0.0063

Venus -84314-08-31 18:56 J -29074022.90 -29074022.71 -29074022.51 0.0063 0.0032

Venus -84313-04-12 23:30 J -29073797.74 -29073797.52 -29073797.29 0.0063 0.0002

Venus -84313-11-24 03:49 J -29073572.53 -29073572.34 -29073572.13 0.0064 0.0030

Venus -84312-07-07 08:08 J -29073347.20 -29073347.16 -29073347.07 0.0064 0.0061

Moon -84305-07-07 09:06 J -29070790.33 -29070790.12 -29070789.90 0.0066 0.0037

Earth -84305-07-07 10:04 J -29070790.29 -29070790.08 -29070789.84 0.0066 0.0037 \*

Moon -84304-07-09 00:42 J -29070423.54 -29070423.47 -29070423.34 0.0067 0.0062

Earth -84304-07-09 01:54 J -29070423.50 -29070423.42 -29070423.29 0.0067 0.0061 \*

Mars -84304-12-10 18:28 J -29070269.07 -29070268.73 -29070268.40 0.0067 0.0012

Mercury -84230-02-03 21:06 J -29043550.64 -29043550.62 -29043550.60 0.0085 0.0083

Mercury -84230-05-02 22:18 J -29043462.64 -29043462.57 -29043462.50 0.0085 0.0071

Mercury -84230-07-29 23:44 J -29043374.61 -29043374.51 -29043374.42 0.0084 0.0059

Mercury -84230-10-26 00:42 J -29043286.57 -29043286.47 -29043286.34 0.0084 0.0048

Mercury -84229-01-22 02:08 J -29043198.52 -29043198.41 -29043198.28 0.0084 0.0036

Mercury -84229-04-19 03:35 J -29043110.47 -29043110.35 -29043110.22 0.0084 0.0023

Mercury -84229-07-16 05:01 J -29043022.42 -29043022.29 -29043022.16 0.0084 0.0011

Mercury -84229-10-12 06:13 J -29042934.37 -29042934.24 -29042934.10 0.0084 0.0002

Mercury -84228-01-08 07:40 J -29042846.31 -29042846.18 -29042846.05 0.0084 0.0012

Mercury -84228-04-06 08:52 J -29042758.26 -29042758.13 -29042758.00 0.0084 0.0023

Mercury -84228-07-03 10:04 J -29042670.20 -29042670.08 -29042669.95 0.0083 0.0035

Mercury -84228-09-29 11:16 J -29042582.13 -29042582.03 -29042581.91 0.0083 0.0046

Mercury -84228-12-26 12:28 J -29042494.07 -29042493.98 -29042493.88 0.0083 0.0057

Mercury -84227-03-24 13:40 J -29042405.99 -29042405.93 -29042405.85 0.0083 0.0069

Mercury -84227-06-20 15:06 J -29042317.90 -29042317.87 -29042317.83 0.0083 0.0079

Venus -84224-03-08 08:52 J -29041326.32 -29041326.13 -29041325.92 0.0082 0.0029

Venus -84224-10-19 19:11 J -29041100.89 -29041100.70 -29041100.49 0.0081 0.0033

Moon -84218-01-12 06:42 J -29039190.45 -29039190.22 -29039189.97 0.0078 0.0019

Earth -84218-01-12 09:35 J -29039190.33 -29039190.10 -29039189.84 0.0078 0.0015 \*

Mercury -84078-08-28 16:18 J -28987826.88 -28987826.82 -28987826.76 0.0060 0.0057

Mercury -84078-11-24 17:30 J -28987738.86 -28987738.77 -28987738.66 0.0060 0.0051

Mercury -84077-02-20 18:42 J -28987650.83 -28987650.72 -28987650.57 0.0060 0.0045

Mercury -84077-05-18 20:08 J -28987562.79 -28987562.66 -28987562.49 0.0061 0.0039

Mercury -84077-08-14 21:35 J -28987474.75 -28987474.60 -28987474.42 0.0061 0.0033

Mercury -84077-11-10 23:16 J -28987386.70 -28987386.53 -28987386.35 0.0061 0.0026

Mercury -84076-02-07 00:42 J -28987298.65 -28987298.47 -28987298.28 0.0061 0.0020

Mercury -84076-05-06 02:08 J -28987210.59 -28987210.41 -28987210.21 0.0061 0.0014

Mercury -84076-08-02 03:49 J -28987122.54 -28987122.34 -28987122.15 0.0061 0.0007

Mercury -84076-10-29 05:16 J -28987034.48 -28987034.28 -28987034.09 0.0061 0.0001

Mercury -84075-01-25 06:28 J -28986946.42 -28986946.23 -28986946.03 0.0061 0.0006

Mercury -84075-04-23 07:54 J -28986858.35 -28986858.17 -28986857.97 0.0061 0.0012

Mercury -84075-07-20 09:35 J -28986770.29 -28986770.10 -28986769.92 0.0061 0.0019

Mercury -84075-10-16 10:47 J -28986682.22 -28986682.05 -28986681.86 0.0061 0.0025

Mercury -84074-01-12 12:28 J -28986594.14 -28986593.98 -28986593.81 0.0061 0.0032

Mercury -84074-04-10 13:40 J -28986506.07 -28986505.93 -28986505.76 0.0061 0.0038

Mercury -84074-07-07 15:20 J -28986417.98 -28986417.86 -28986417.72 0.0061 0.0045

Mercury -84074-10-03 16:32 J -28986329.89 -28986329.81 -28986329.69 0.0061 0.0052

Mercury -84074-12-30 17:44 J -28986241.79 -28986241.76 -28986241.67 0.0062 0.0059

Venus -84068-02-16 02:37 J -28984367.48 -28984367.39 -28984367.24 0.0063 0.0054

Venus -84068-09-29 07:25 J -28984142.39 -28984142.19 -28984141.96 0.0063 0.0023

Venus -84067-05-12 12:13 J -28983917.21 -28983916.99 -28983916.75 0.0064 0.0008

Venus -84067-12-23 16:32 J -28983691.97 -28983691.81 -28983691.61 0.0064 0.0039

Earth -84059-07-09 18:28 J -28980936.99 -28980936.73 -28980936.46 0.0067 0.0010

Moon -84059-07-09 22:04 J -28980936.83 -28980936.58 -28980936.31 0.0067 0.0010 \*

# 84TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 84th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-83985-12-30 12:56 J	-28953734.00	-28953733.96	-28953733.89	0.0085	0.0078		
Mercury	-83984-03-28 14:23 J	-28953645.97	-28953645.90	-28953645.81	0.0085	0.0066		
Mercury	-83984-06-24 15:49 J	-28953557.94	-28953557.84	-28953557.73	0.0084	0.0053		
Mercury	-83984-09-20 17:16 J	-28953469.90	-28953469.78	-28953469.66	0.0084	0.0041		
Mercury	-83984-12-17 18:28 J	-28953381.85	-28953381.73	-28953381.60	0.0084	0.0030		
Mercury	-83983-03-15 19:54 J	-28953293.80	-28953293.67	-28953293.54	0.0084	0.0018		
Mercury	-83983-06-11 21:06 J	-28953205.75	-28953205.62	-28953205.48	0.0084	0.0007		
Mercury	-83983-09-07 22:32 J	-28953117.70	-28953117.56	-28953117.43	0.0084	0.0006		
Mercury	-83983-12-04 23:44 J	-28953029.64	-28953029.51	-28953029.38	0.0084	0.0017		
Mercury	-83982-03-03 00:56 J	-28952941.58	-28952941.46	-28952941.33	0.0084	0.0029		
Mercury	-83982-05-30 02:08 J	-28952853.52	-28952853.41	-28952853.29	0.0083	0.0040		
Mercury	-83982-08-26 03:20 J	-28952765.45	-28952765.36	-28952765.25	0.0083	0.0052		
Mercury	-83982-11-22 04:47 J	-28952677.38	-28952677.30	-28952677.21	0.0083	0.0062		
Mercury	-83981-02-18 05:59 J	-28952589.31	-28952589.25	-28952589.19	0.0083	0.0073		
Venus	-83979-08-24 14:37 J	-28951671.00	-28951670.89	-28951670.77	0.0082	0.0068		
Venus	-83978-04-07 00:56 J	-28951445.67	-28951445.46	-28951445.24	0.0081	0.0007		
Venus	-83978-11-18 10:47 J	-28951220.19	-28951220.05	-28951219.87	0.0081	0.0055		
Earth	-83972-01-13 20:08 J	-28949336.88	-28949336.66	-28949336.41	0.0078	0.0026		
Moon	-83972-01-13 22:32 J	-28949336.79	-28949336.56	-28949336.31	0.0078	0.0022	*	



Mars -83972-10-27 04:32 J -28949050.55 -28949050.31 -28949050.02 0.0078 0.0033  
 Mercury -83832-04-27 05:44 J -28898098.29 -28898098.26 -28898098.20 0.0060 0.0059  
 Mercury -83832-07-24 07:11 J -28898010.28 -28898010.20 -28898010.09 0.0060 0.0053  
 Mercury -83832-10-20 08:23 J -28897922.25 -28897922.15 -28897922.00 0.0060 0.0047  
 Mercury -83831-01-16 09:49 J -28897834.21 -28897834.09 -28897833.92 0.0060 0.0041  
 Mercury -83831-04-14 11:16 J -28897746.17 -28897746.03 -28897745.85 0.0061 0.0035  
 Mercury -83831-07-11 13:11 J -28897658.12 -28897657.95 -28897657.78 0.0061 0.0028  
 Mercury -83831-10-07 14:23 J -28897570.07 -28897569.90 -28897569.71 0.0061 0.0022  
 Mercury -83830-01-03 15:49 J -28897482.02 -28897481.84 -28897481.64 0.0061 0.0016  
 Mercury -83830-04-01 17:30 J -28897393.96 -28897393.77 -28897393.58 0.0061 0.0009  
 Mercury -83830-06-28 18:56 J -28897305.90 -28897305.71 -28897305.51 0.0061 0.0003  
 Mercury -83830-09-24 20:23 J -28897217.84 -28897217.65 -28897217.45 0.0061 0.0004  
 Mercury -83830-12-21 21:49 J -28897129.78 -28897129.59 -28897129.39 0.0061 0.0010  
 Mercury -83829-03-18 23:16 J -28897041.71 -28897041.53 -28897041.34 0.0061 0.0017  
 Mercury -83829-06-15 00:28 J -28896953.64 -28896953.48 -28896953.28 0.0061 0.0024  
 Mercury -83829-09-11 02:08 J -28896865.57 -28896865.41 -28896865.23 0.0061 0.0030  
 Mercury -83829-12-08 03:20 J -28896777.49 -28896777.36 -28896777.18 0.0061 0.0037  
 Mercury -83828-03-06 05:01 J -28896689.41 -28896689.29 -28896689.14 0.0061 0.0043  
 Mercury -83828-06-02 06:13 J -28896601.33 -28896601.24 -28896601.10 0.0061 0.0050  
 Mercury -83828-08-29 08:08 J -28896513.23 -28896513.16 -28896513.07 0.0062 0.0056  
 Venus -83822-03-17 16:18 J -28894486.96 -28894486.82 -28894486.63 0.0063 0.0043  
 Venus -83822-10-28 21:20 J -28894261.83 -28894261.61 -28894261.38 0.0063 0.0012  
 Venus -83821-06-10 01:54 J -28894036.63 -28894036.42 -28894036.20 0.0064 0.0019  
 Venus -83820-01-21 06:13 J -28893811.36 -28893811.24 -28893811.08 0.0064 0.0050  
 Earth -83813-07-11 04:47 J -28891083.54 -28891083.30 -28891083.04 0.0067 0.0024  
 Moon -83813-07-11 04:47 J -28891083.54 -28891083.30 -28891083.02 0.0067 0.0023 \*  
 Mercury -83739-08-30 04:47 J -28864005.34 -28864005.30 -28864005.25 0.0085 0.0080  
 Mercury -83739-11-26 05:59 J -28863917.32 -28863917.25 -28863917.16 0.0085 0.0068  
 Mercury -83738-02-22 07:25 J -28863829.28 -28863829.19 -28863829.08 0.0084 0.0056  
 Mercury -83738-05-21 08:52 J -28863741.24 -28863741.13 -28863741.01 0.0084 0.0044

Mercury -83738-08-17 10:04 J -28863653.19 -28863653.08 -28863652.95 0.0084 0.0032

Mercury -83738-11-13 11:30 J -28863565.15 -28863565.02 -28863564.89 0.0084 0.0020

Mercury -83737-02-09 12:56 J -28863477.10 -28863476.96 -28863476.83 0.0084 0.0008

Mercury -83737-05-07 14:08 J -28863389.04 -28863388.91 -28863388.78 0.0084 0.0003

Mercury -83737-08-03 15:20 J -28863300.99 -28863300.86 -28863300.72 0.0084 0.0015

Mercury -83737-10-30 16:32 J -28863212.93 -28863212.81 -28863212.68 0.0084 0.0027

Mercury -83736-01-26 17:59 J -28863124.87 -28863124.75 -28863124.63 0.0083 0.0038

Mercury -83736-04-24 18:56 J -28863036.80 -28863036.71 -28863036.59 0.0083 0.0050

Mercury -83736-07-21 20:23 J -28862948.74 -28862948.65 -28862948.55 0.0083 0.0060

Mercury -83736-10-17 21:35 J -28862860.66 -28862860.60 -28862860.53 0.0083 0.0071

Mercury -83735-01-13 22:47 J -28862772.55 -28862772.55 -28862772.53 0.0083 0.0082

Venus -83733-09-22 08:52 J -28861790.31 -28861790.13 -28861789.93 0.0081 0.0038

Venus -83732-05-05 19:11 J -28861564.90 -28861564.70 -28861564.49 0.0081 0.0023

Moon -83727-01-14 07:40 J -28859850.27 -28859850.18 -28859850.07 0.0078 0.0071

Earth -83727-01-14 10:04 J -28859850.13 -28859850.08 -28859849.97 0.0078 0.0075 \*

Earth -83726-01-16 10:32 J -28859483.07 -28859483.06 -28859483.02 0.0078 0.0077

Moon -83726-01-16 12:13 J -28859483.04 -28859482.99 -28859482.88 0.0078 0.0074 \*

Mercury -83586-03-23 20:23 J -28808281.71 -28808281.65 -28808281.56 0.0060 0.0056

Mercury -83586-06-19 21:49 J -28808193.68 -28808193.59 -28808193.47 0.0060 0.0050

Mercury -83586-09-15 23:16 J -28808105.65 -28808105.53 -28808105.38 0.0060 0.0044

Mercury -83586-12-13 00:28 J -28808017.61 -28808017.48 -28808017.31 0.0061 0.0038

Mercury -83585-03-10 01:54 J -28807929.56 -28807929.42 -28807929.23 0.0061 0.0032

Mercury -83585-06-06 03:49 J -28807841.52 -28807841.34 -28807841.16 0.0061 0.0025

Mercury -83585-09-02 05:01 J -28807753.46 -28807753.29 -28807753.10 0.0061 0.0019

Mercury -83585-11-29 06:28 J -28807665.41 -28807665.23 -28807665.03 0.0061 0.0013

Mercury -83584-02-25 08:08 J -28807577.35 -28807577.16 -28807576.97 0.0061 0.0006

Mercury -83584-05-24 09:35 J -28807489.29 -28807489.10 -28807488.91 0.0061 0.0000

Mercury -83584-08-20 11:01 J -28807401.23 -28807401.04 -28807400.85 0.0061 0.0007

Mercury -83584-11-16 12:28 J -28807313.17 -28807312.98 -28807312.79 0.0061 0.0013

Mercury -83583-02-12 13:54 J -28807225.10 -28807224.92 -28807224.73 0.0061 0.0019

Mercury -83583-05-11 15:06 J -28807137.03 -28807136.87 -28807136.68 0.0061 0.0026

Mercury -83583-08-07 16:47 J -28807048.96 -28807048.80 -28807048.63 0.0061 0.0032

Mercury -83583-11-03 17:59 J -28806960.88 -28806960.75 -28806960.58 0.0061 0.0039

Mercury -83582-01-30 19:40 J -28806872.80 -28806872.68 -28806872.54 0.0061 0.0046

Mercury -83582-04-28 20:52 J -28806784.70 -28806784.63 -28806784.50 0.0061 0.0053

Mercury -83582-07-25 22:32 J -28806696.60 -28806696.56 -28806696.49 0.0062 0.0059

Venus -83576-04-15 05:01 J -28804606.46 -28804606.29 -28804606.08 0.0063 0.0034

Venus -83576-11-26 10:04 J -28804381.31 -28804381.08 -28804380.86 0.0064 0.0004

Venus -83575-07-09 14:23 J -28804156.10 -28804155.90 -28804155.69 0.0064 0.0027

Venus -83574-02-19 18:56 J -28803930.79 -28803930.71 -28803930.61 0.0064 0.0058

Earth -83568-07-11 21:20 J -28801596.79 -28801596.61 -28801596.42 0.0066 0.0047

Moon -83568-07-12 00:42 J -28801596.65 -28801596.47 -28801596.26 0.0066 0.0045 \*

Moon -83567-07-13 09:20 J -28801230.27 -28801230.11 -28801229.91 0.0067 0.0049

Earth -83567-07-13 12:56 J -28801230.11 -28801229.96 -28801229.77 0.0067 0.0051 \*

Mars -83566-03-27 01:11 J -28800973.79 -28800973.45 -28800973.10 0.0067 0.0001

Mercury -83493-07-25 20:52 J -28774188.68 -28774188.63 -28774188.56 0.0085 0.0075

Mercury -83493-10-21 22:18 J -28774100.65 -28774100.57 -28774100.48 0.0085 0.0063

Mercury -83492-01-17 23:44 J -28774012.61 -28774012.51 -28774012.40 0.0084 0.0051

Mercury -83492-04-16 00:56 J -28773924.57 -28773924.46 -28773924.33 0.0084 0.0039

Mercury -83492-07-13 02:23 J -28773836.52 -28773836.40 -28773836.27 0.0084 0.0027

Mercury -83492-10-09 03:35 J -28773748.48 -28773748.35 -28773748.21 0.0084 0.0016

Mercury -83491-01-05 05:01 J -28773660.42 -28773660.29 -28773660.16 0.0084 0.0004

Mercury -83491-04-03 06:13 J -28773572.37 -28773572.24 -28773572.10 0.0084 0.0008

Mercury -83491-06-30 07:25 J -28773484.31 -28773484.19 -28773484.05 0.0084 0.0020

Mercury -83491-09-26 08:52 J -28773396.25 -28773396.13 -28773396.01 0.0084 0.0031

Mercury -83491-12-23 10:04 J -28773308.19 -28773308.08 -28773307.96 0.0083 0.0042

Mercury -83490-03-21 11:16 J -28773220.13 -28773220.03 -28773219.92 0.0083 0.0053

Mercury -83490-06-17 12:28 J -28773132.06 -28773131.98 -28773131.89 0.0083 0.0064

Mercury -83490-09-13 13:40 J -28773043.97 -28773043.93 -28773043.87 0.0083 0.0075

Venus -83487-03-10 13:54 J -28772134.95 -28772134.92 -28772134.87 0.0082 0.0080

Venus -83487-10-22 00:28 J -28771909.69 -28771909.48 -28771909.27 0.0081 0.0018  
 Venus -83486-06-04 10:18 J -28771684.24 -28771684.07 -28771683.88 0.0081 0.0042  
 Earth -83481-01-16 19:54 J -28769996.87 -28769996.67 -28769996.43 0.0078 0.0037  
 Moon -83481-01-16 22:47 J -28769996.77 -28769996.55 -28769996.33 0.0078 0.0034 \*  
 Mercury -83341-11-20 09:49 J -28718553.11 -28718553.09 -28718553.01 0.0060 0.0059  
 Mercury -83340-02-16 11:16 J -28718465.10 -28718465.03 -28718464.91 0.0060 0.0052  
 Mercury -83340-05-15 13:11 J -28718377.07 -28718376.95 -28718376.82 0.0060 0.0046  
 Mercury -83340-08-11 14:23 J -28718289.03 -28718288.90 -28718288.75 0.0061 0.0040  
 Mercury -83340-11-07 15:49 J -28718200.99 -28718200.84 -28718200.67 0.0061 0.0034  
 Mercury -83339-02-03 17:01 J -28718112.94 -28718112.79 -28718112.60 0.0061 0.0028  
 Mercury -83339-05-02 18:28 J -28718024.89 -28718024.73 -28718024.53 0.0061 0.0022  
 Mercury -83339-07-29 20:08 J -28717936.84 -28717936.66 -28717936.47 0.0061 0.0015  
 Mercury -83339-10-25 21:35 J -28717848.79 -28717848.60 -28717848.40 0.0061 0.0009  
 Mercury -83338-01-21 23:01 J -28717760.73 -28717760.54 -28717760.34 0.0061 0.0003  
 Mercury -83338-04-20 00:42 J -28717672.67 -28717672.47 -28717672.28 0.0061 0.0004  
 Mercury -83338-07-17 02:08 J -28717584.60 -28717584.41 -28717584.22 0.0061 0.0010  
 Mercury -83338-10-13 03:20 J -28717496.54 -28717496.36 -28717496.17 0.0061 0.0017  
 Mercury -83337-01-09 04:47 J -28717408.47 -28717408.30 -28717408.11 0.0061 0.0023  
 Mercury -83337-04-06 06:28 J -28717320.40 -28717320.23 -28717320.06 0.0061 0.0030  
 Mercury -83337-07-03 07:40 J -28717232.32 -28717232.18 -28717232.01 0.0061 0.0036  
 Mercury -83337-09-29 09:20 J -28717144.24 -28717144.11 -28717143.97 0.0061 0.0043  
 Mercury -83337-12-26 10:32 J -28717056.15 -28717056.06 -28717055.93 0.0061 0.0050  
 Mercury -83336-03-24 12:28 J -28716968.06 -28716967.98 -28716967.90 0.0062 0.0056  
 Venus -83331-10-01 13:54 J -28714951.01 -28714950.92 -28714950.78 0.0063 0.0055  
 Venus -83330-05-14 18:42 J -28714725.91 -28714725.72 -28714725.49 0.0063 0.0025  
 Venus -83330-12-25 23:30 J -28714500.74 -28714500.52 -28714500.29 0.0064 0.0007  
 Venus -83329-08-07 04:04 J -28714275.50 -28714275.33 -28714275.14 0.0064 0.0037  
 Earth -83322-07-14 06:56 J -28711743.46 -28711743.21 -28711742.94 0.0066 0.0015  
 Moon -83322-07-14 07:11 J -28711743.46 -28711743.20 -28711742.92 0.0066 0.0013 \*  
 Mercury -83247-03-25 12:28 J -28684460.03 -28684459.98 -28684459.93 0.0085 0.0078

Mercury -83247-06-21 13:25 J -28684372.01 -28684371.94 -28684371.84 0.0085 0.0067

Mercury -83247-09-17 14:52 J -28684283.97 -28684283.88 -28684283.77 0.0084 0.0055

Mercury -83247-12-14 16:18 J -28684195.93 -28684195.82 -28684195.70 0.0084 0.0042

Mercury -83246-03-12 17:44 J -28684107.88 -28684107.76 -28684107.63 0.0084 0.0030

Mercury -83246-06-08 18:56 J -28684019.83 -28684019.71 -28684019.57 0.0084 0.0019

Mercury -83246-09-04 20:23 J -28683931.78 -28683931.65 -28683931.52 0.0084 0.0007

Mercury -83246-12-01 21:35 J -28683843.73 -28683843.60 -28683843.46 0.0084 0.0005

Mercury -83245-02-27 23:01 J -28683755.67 -28683755.54 -28683755.41 0.0084 0.0016

Mercury -83245-05-26 00:13 J -28683667.61 -28683667.49 -28683667.36 0.0084 0.0027

Mercury -83245-08-22 01:25 J -28683579.55 -28683579.44 -28683579.32 0.0083 0.0039

Mercury -83245-11-18 02:37 J -28683491.49 -28683491.39 -28683491.27 0.0083 0.0050

Mercury -83244-02-14 03:49 J -28683403.42 -28683403.34 -28683403.24 0.0083 0.0061

Mercury -83244-05-13 05:01 J -28683315.34 -28683315.29 -28683315.21 0.0083 0.0072

Venus -83241-04-08 07:25 J -28682254.34 -28682254.19 -28682254.01 0.0081 0.0053

Venus -83241-11-19 17:59 J -28682028.96 -28682028.75 -28682028.53 0.0081 0.0008

Venus -83240-07-03 03:49 J -28681803.45 -28681803.34 -28681803.22 0.0081 0.0068

Earth -83235-01-18 08:52 J -28680143.37 -28680143.13 -28680142.87 0.0078 0.0012

Moon -83235-01-18 11:30 J -28680143.27 -28680143.02 -28680142.76 0.0078 0.0015 \*

Mars -83234-02-12 06:13 J -28679753.49 -28679753.24 -28679752.96 0.0078 0.0034

Mercury -83095-10-17 00:42 J -28628736.53 -28628736.47 -28628736.38 0.0060 0.0056

Mercury -83094-01-13 01:54 J -28628648.50 -28628648.42 -28628648.29 0.0060 0.0050

Mercury -83094-04-11 03:20 J -28628560.47 -28628560.36 -28628560.20 0.0060 0.0044

Mercury -83094-07-08 04:47 J -28628472.43 -28628472.30 -28628472.13 0.0061 0.0038

Mercury -83094-10-04 06:42 J -28628384.38 -28628384.22 -28628384.05 0.0061 0.0031

Mercury -83094-12-31 07:54 J -28628296.34 -28628296.17 -28628295.98 0.0061 0.0025

Mercury -83093-03-28 09:20 J -28628208.28 -28628208.11 -28628207.92 0.0061 0.0019

Mercury -83093-06-24 10:47 J -28628120.23 -28628120.05 -28628119.85 0.0061 0.0013

Mercury -83093-09-20 12:28 J -28628032.17 -28628031.98 -28628031.79 0.0061 0.0006

Mercury -83093-12-17 13:54 J -28627944.11 -28627943.92 -28627943.73 0.0061 0.0000

Mercury -83092-03-15 15:20 J -28627856.05 -28627855.86 -28627855.67 0.0061 0.0006

Mercury	-83092-06-11 16:32 J	-28627767.99	-28627767.81	-28627767.61	0.0061	0.0013
Mercury	-83092-09-07 17:59 J	-28627679.92	-28627679.75	-28627679.55	0.0061	0.0020
Mercury	-83092-12-04 19:40 J	-28627591.85	-28627591.68	-28627591.50	0.0061	0.0026
Mercury	-83091-03-02 20:52 J	-28627503.78	-28627503.63	-28627503.45	0.0061	0.0032
Mercury	-83091-05-29 22:32 J	-28627415.70	-28627415.56	-28627415.40	0.0061	0.0039
Mercury	-83091-08-25 23:44 J	-28627327.62	-28627327.51	-28627327.36	0.0061	0.0046
Mercury	-83091-11-22 01:25 J	-28627239.53	-28627239.44	-28627239.33	0.0061	0.0052
Mercury	-83090-02-18 02:37 J	-28627151.43	-28627151.39	-28627151.31	0.0062	0.0059
Venus	-83085-10-30 02:08 J	-28625070.53	-28625070.41	-28625070.23	0.0063	0.0047
Venus	-83084-06-12 07:11 J	-28624845.41	-28624845.20	-28624844.97	0.0064	0.0017
Venus	-83083-01-23 11:44 J	-28624620.22	-28624620.01	-28624619.78	0.0064	0.0014
Venus	-83083-09-05 16:04 J	-28624394.97	-28624394.83	-28624394.64	0.0064	0.0045
Moon	-83076-07-15 10:47 J	-28621890.31	-28621890.05	-28621889.79	0.0067	0.0014
Earth	-83076-07-15 14:37 J	-28621890.15	-28621889.89	-28621889.62	0.0067	0.0011 *
Mercury	-83001-02-19 04:04 J	-28594643.38	-28594643.33	-28594643.26	0.0085	0.0075
Mercury	-83001-05-17 05:30 J	-28594555.35	-28594555.27	-28594555.17	0.0085	0.0063
Mercury	-83001-08-13 06:56 J	-28594467.31	-28594467.21	-28594467.10	0.0084	0.0051
Mercury	-83001-11-09 08:23 J	-28594379.27	-28594379.15	-28594379.03	0.0084	0.0039

# 83RD MILLENNIUM BCE

This is a list of transits visible from Pluto in the 83rd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury -83000-02-05 09:35 J -28594291.22 -28594291.10 -28594290.97 0.0084 0.0027

Mercury -83000-05-04 11:01 J -28594203.17 -28594203.04 -28594202.91 0.0084 0.0015

Mercury -83000-07-31 12:13 J -28594115.12 -28594114.99 -28594114.85 0.0084 0.0004

Mercury -83000-10-27 13:40 J -28594027.06 -28594026.93 -28594026.80 0.0084 0.0008

Mercury -82999-01-23 14:52 J -28593939.01 -28593938.88 -28593938.75 0.0084 0.0019

Mercury -82999-04-21 16:04 J -28593850.95 -28593850.83 -28593850.70 0.0083 0.0031

Mercury -82999-07-18 17:16 J -28593762.89 -28593762.78 -28593762.66 0.0083 0.0042

Mercury -82999-10-14 18:28 J -28593674.82 -28593674.73 -28593674.62 0.0083 0.0054

Mercury -82998-01-10 19:54 J -28593586.75 -28593586.67 -28593586.58 0.0083 0.0064

Mercury -82998-04-08 21:06 J -28593498.67 -28593498.62 -28593498.56 0.0083 0.0075

Venus -82995-05-07 22:32 J -28592373.75 -28592373.56 -28592373.36 0.0081 0.0035

Venus -82995-12-19 08:37 J -28592148.34 -28592148.14 -28592147.93 0.0081 0.0025

Moon -82989-01-20 15:06 J -28590290.05 -28590289.87 -28590289.65 0.0078 0.0048

Earth -82989-01-20 18:13 J -28590289.93 -28590289.74 -28590289.52 0.0078 0.0046 \*

Mercury -82849-06-15 13:54 J -28539007.94 -28539007.92 -28539007.86 0.0060 0.0059

Mercury -82849-09-11 15:20 J -28538919.94 -28538919.86 -28538919.75 0.0060 0.0053

Mercury -82849-12-08 16:47 J -28538831.91 -28538831.80 -28538831.66 0.0060 0.0047

Mercury -82848-03-06 18:13 J -28538743.87 -28538743.74 -28538743.58 0.0061 0.0041

Mercury -82848-06-02 19:25 J -28538655.83 -28538655.69 -28538655.51 0.0061 0.0035

Mercury -82848-08-29 20:52 J -28538567.78 -28538567.63 -28538567.44 0.0061 0.0029

Mercury -82848-11-25 22:47 J -28538479.73 -28538479.55 -28538479.37 0.0061 0.0022

Mercury -82847-02-21 23:59 J -28538391.68 -28538391.50 -28538391.30 0.0061 0.0016

Mercury -82847-05-21 01:25 J -28538303.62 -28538303.44 -28538303.24 0.0061 0.0010

Mercury -82847-08-17 03:06 J -28538215.56 -28538215.37 -28538215.18 0.0061 0.0003

Mercury -82847-11-13 04:32 J -28538127.50 -28538127.31 -28538127.12 0.0061 0.0003

Mercury -82846-02-09 05:59 J -28538039.44 -28538039.25 -28538039.06 0.0061 0.0009

Mercury -82846-05-08 07:11 J -28537951.37 -28537951.20 -28537951.00 0.0061 0.0016

Mercury -82846-08-04 08:37 J -28537863.31 -28537863.14 -28537862.95 0.0061 0.0023

Mercury -82846-10-31 10:18 J -28537775.23 -28537775.07 -28537774.89 0.0061 0.0029

Mercury -82845-01-27 11:30 J -28537687.16 -28537687.02 -28537686.84 0.0061 0.0036

Mercury -82845-04-24 13:11 J -28537599.08 -28537598.95 -28537598.80 0.0061 0.0042

Mercury -82845-07-21 14:23 J -28537511.00 -28537510.90 -28537510.76 0.0061 0.0049

Mercury -82845-10-17 16:04 J -28537422.90 -28537422.83 -28537422.73 0.0062 0.0055

Mercury -82844-01-13 17:30 J -28537334.77 -28537334.77 -28537334.74 0.0062 0.0062

Venus -82839-11-28 15:20 J -28535190.03 -28535189.86 -28535189.68 0.0063 0.0039

Venus -82838-07-11 19:54 J -28534964.89 -28534964.67 -28534964.44 0.0064 0.0009

Venus -82837-02-22 00:28 J -28534739.69 -28534739.48 -28534739.26 0.0064 0.0022

Venus -82837-10-04 05:01 J -28534514.40 -28534514.29 -28534514.15 0.0064 0.0053

Earth -82831-07-16 07:40 J -28532403.29 -28532403.18 -28532403.03 0.0066 0.0058

Moon -82831-07-16 08:23 J -28532403.22 -28532403.15 -28532403.00 0.0066 0.0061 \*

Earth -82830-07-17 23:44 J -28532036.72 -28532036.51 -28532036.30 0.0067 0.0040

Moon -82830-07-17 23:44 J -28532036.67 -28532036.51 -28532036.29 0.0067 0.0044 \*

Mars -82829-07-10 00:42 J -28531678.79 -28531678.47 -28531678.11 0.0067 0.0013

Mercury -82756-10-18 19:40 J -28504914.73 -28504914.68 -28504914.64 0.0085 0.0079

Mercury -82755-01-14 20:37 J -28504826.70 -28504826.64 -28504826.54 0.0085 0.0068

Mercury -82755-04-12 22:04 J -28504738.67 -28504738.58 -28504738.47 0.0084 0.0056

Mercury -82755-07-09 23:30 J -28504650.63 -28504650.52 -28504650.40 0.0084 0.0044

Mercury -82755-10-06 00:56 J -28504562.58 -28504562.46 -28504562.33 0.0084 0.0032

Mercury -82754-01-02 02:08 J -28504474.53 -28504474.41 -28504474.27 0.0084 0.0020

Mercury -82754-03-31 03:35 J -28504386.48 -28504386.35 -28504386.22 0.0084 0.0008

Mercury -82754-06-27 04:47 J -28504298.43 -28504298.30 -28504298.16 0.0084 0.0004

Mercury -82754-09-23 06:13 J -28504210.37 -28504210.24 -28504210.11 0.0084 0.0015

Mercury -82754-12-20 07:25 J -28504122.31 -28504122.19 -28504122.06 0.0084 0.0026

Mercury -82753-03-17 08:37 J -28504034.25 -28504034.14 -28504034.02 0.0083 0.0037

Mercury -82753-06-13 09:49 J -28503946.19 -28503946.09 -28503945.97 0.0083 0.0049

Mercury -82753-09-09 11:16 J -28503858.12 -28503858.03 -28503857.94 0.0083 0.0060

Mercury -82753-12-06 12:13 J -28503770.05 -28503769.99 -28503769.91 0.0083 0.0071

Mercury -82752-03-04 13:25 J -28503681.95 -28503681.94 -28503681.91 0.0083 0.0082

Venus -82750-10-24 04:47 J -28502718.38 -28502718.30 -28502718.19 0.0081 0.0073

Venus -82749-06-05 15:06 J -28502493.07 -28502492.87 -28502492.65 0.0081 0.0013



Venus -82748-01-17 01:11 J -28502267.61 -28502267.45 -28502267.27 0.0081 0.0048

Earth -82744-01-20 05:44 J -28500803.40 -28500803.26 -28500803.09 0.0079 0.0062

Moon -82744-01-20 08:08 J -28500803.30 -28500803.16 -28500802.99 0.0079 0.0063 \*

Mercury -82603-05-12 03:49 J -28449191.37 -28449191.34 -28449191.25 0.0060 0.0058

Mercury -82603-08-08 05:16 J -28449103.36 -28449103.28 -28449103.15 0.0060 0.0052

Mercury -82603-11-04 06:42 J -28449015.32 -28449015.22 -28449015.07 0.0060 0.0046

Mercury -82602-01-31 08:37 J -28448927.28 -28448927.14 -28448926.99 0.0061 0.0039

Mercury -82602-04-29 09:49 J -28448839.24 -28448839.09 -28448838.92 0.0061 0.0033

Mercury -82602-07-26 11:16 J -28448751.19 -28448751.03 -28448750.85 0.0061 0.0027

Mercury -82602-10-22 12:42 J -28448663.14 -28448662.97 -28448662.78 0.0061 0.0021

Mercury -82601-01-18 14:08 J -28448575.09 -28448574.91 -28448574.71 0.0061 0.0015

Mercury -82601-04-15 15:49 J -28448487.03 -28448486.84 -28448486.65 0.0061 0.0008

Mercury -82601-07-12 17:16 J -28448398.97 -28448398.78 -28448398.59 0.0061 0.0002

Mercury -82601-10-08 18:42 J -28448310.91 -28448310.72 -28448310.53 0.0061 0.0004

Mercury -82600-01-04 19:54 J -28448222.85 -28448222.67 -28448222.47 0.0061 0.0011

Mercury -82600-04-02 21:20 J -28448134.78 -28448134.61 -28448134.41 0.0061 0.0017

Mercury -82600-06-29 23:01 J -28448046.72 -28448046.54 -28448046.36 0.0061 0.0024

Mercury -82600-09-26 00:13 J -28447958.64 -28447958.49 -28447958.31 0.0061 0.0030

Mercury -82600-12-23 01:40 J -28447870.57 -28447870.43 -28447870.26 0.0061 0.0037

Mercury -82599-03-21 02:52 J -28447782.49 -28447782.38 -28447782.21 0.0061 0.0044

Mercury -82599-06-17 04:32 J -28447694.40 -28447694.31 -28447694.18 0.0061 0.0050

Mercury -82599-09-13 06:28 J -28447606.30 -28447606.23 -28447606.15 0.0062 0.0056

Venus -82593-12-27 02:37 J -28445309.56 -28445309.39 -28445309.18 0.0064 0.0035

Venus -82592-08-09 07:40 J -28445084.41 -28445084.18 -28445083.96 0.0064 0.0004

Venus -82591-03-22 11:44 J -28444859.19 -28444859.01 -28444858.78 0.0064 0.0027

Venus -82591-11-02 16:18 J -28444633.88 -28444633.82 -28444633.69 0.0064 0.0058

Moon -82585-07-17 10:32 J -28442550.26 -28442550.06 -28442549.84 0.0066 0.0040

Earth -82585-07-17 13:54 J -28442550.12 -28442549.92 -28442549.68 0.0066 0.0036 \*

Earth -82584-07-19 05:16 J -28442183.35 -28442183.28 -28442183.16 0.0067 0.0062

Moon -82584-07-19 09:06 J -28442183.16 -28442183.12 -28442183.05 0.0067 0.0065 \*

Mercury -82510-09-14 10:47 J -28415098.09 -28415098.05 -28415097.99 0.0085 0.0078

Mercury -82510-12-11 12:13 J -28415010.06 -28415009.99 -28415009.90 0.0085 0.0066

Mercury -82509-03-08 13:40 J -28414922.03 -28414921.93 -28414921.82 0.0084 0.0054

Mercury -82509-06-04 14:52 J -28414833.98 -28414833.88 -28414833.75 0.0084 0.0042

Mercury -82509-08-31 16:18 J -28414745.94 -28414745.82 -28414745.69 0.0084 0.0030

Mercury -82509-11-27 17:44 J -28414657.89 -28414657.76 -28414657.63 0.0084 0.0018

Mercury -82508-02-23 19:11 J -28414569.84 -28414569.70 -28414569.57 0.0084 0.0007

Mercury -82508-05-22 20:23 J -28414481.78 -28414481.65 -28414481.51 0.0084 0.0005

Mercury -82508-08-18 21:35 J -28414393.72 -28414393.60 -28414393.46 0.0084 0.0017

Mercury -82508-11-14 22:47 J -28414305.67 -28414305.55 -28414305.41 0.0084 0.0028

Mercury -82507-02-11 00:13 J -28414217.61 -28414217.49 -28414217.37 0.0083 0.0039

Mercury -82507-05-10 01:11 J -28414129.54 -28414129.45 -28414129.33 0.0083 0.0051

Mercury -82507-08-06 02:37 J -28414041.47 -28414041.39 -28414041.29 0.0083 0.0061

Mercury -82507-11-02 03:49 J -28413953.39 -28413953.34 -28413953.27 0.0083 0.0072

Mercury -82506-01-29 05:16 J -28413865.28 -28413865.28 -28413865.27 0.0083 0.0083

Venus -82504-11-21 18:13 J -28412837.87 -28412837.74 -28412837.58 0.0081 0.0061

Venus -82503-07-05 04:47 J -28412612.52 -28412612.30 -28412612.09 0.0081 0.0001

Venus -82502-02-15 14:08 J -28412387.03 -28412386.91 -28412386.74 0.0081 0.0060

Moon -82498-01-22 09:35 J -28410950.33 -28410950.10 -28410949.87 0.0078 0.0034

Earth -82498-01-22 12:13 J -28410950.20 -28410949.99 -28410949.74 0.0078 0.0035 \*

Mars -82497-05-29 16:18 J -28410457.11 -28410456.82 -28410456.53 0.0078 0.0005

Mercury -82357-04-06 17:44 J -28359374.79 -28359374.76 -28359374.68 0.0060 0.0058

Mercury -82357-07-03 19:11 J -28359286.78 -28359286.70 -28359286.58 0.0060 0.0052

Mercury -82357-09-29 20:37 J -28359198.75 -28359198.64 -28359198.49 0.0060 0.0046

Mercury -82357-12-26 22:04 J -28359110.71 -28359110.58 -28359110.42 0.0061 0.0040

Mercury -82356-03-24 23:16 J -28359022.66 -28359022.53 -28359022.34 0.0061 0.0034

Mercury -82356-06-21 01:11 J -28358934.62 -28358934.45 -28358934.27 0.0061 0.0027

Mercury -82356-09-17 02:37 J -28358846.57 -28358846.39 -28358846.21 0.0061 0.0021

Mercury -82356-12-14 03:49 J -28358758.51 -28358758.34 -28358758.14 0.0061 0.0015

Mercury -82355-03-12 05:16 J -28358670.46 -28358670.28 -28358670.08 0.0061 0.0009

Mercury -82355-06-08 06:56 J -28358582.40 -28358582.21 -28358582.02 0.0061 0.0002

Mercury -82355-09-04 08:23 J -28358494.34 -28358494.15 -28358493.96 0.0061 0.0004

Mercury -82355-12-01 09:49 J -28358406.28 -28358406.09 -28358405.90 0.0061 0.0010

Mercury -82354-02-27 11:01 J -28358318.21 -28358318.04 -28358317.84 0.0061 0.0017

Mercury -82354-05-26 12:28 J -28358230.15 -28358229.98 -28358229.79 0.0061 0.0023

Mercury -82354-08-22 14:08 J -28358142.08 -28358141.91 -28358141.74 0.0061 0.0030

Mercury -82354-11-18 15:20 J -28358054.00 -28358053.86 -28358053.69 0.0061 0.0036

Mercury -82353-02-14 16:47 J -28357965.92 -28357965.80 -28357965.64 0.0061 0.0043

Mercury -82353-05-12 17:59 J -28357877.84 -28357877.75 -28357877.61 0.0061 0.0050

Mercury -82353-08-08 19:40 J -28357789.74 -28357789.68 -28357789.58 0.0062 0.0056

Venus -82347-06-14 08:23 J -28355654.16 -28355654.15 -28355654.09 0.0063 0.0063

Venus -82346-01-25 13:11 J -28355429.13 -28355428.95 -28355428.74 0.0064 0.0033

Venus -82346-09-07 18:13 J -28355203.97 -28355203.74 -28355203.52 0.0064 0.0002

Venus -82345-04-19 22:32 J -28354978.74 -28354978.56 -28354978.34 0.0064 0.0029

Venus -82345-12-01 03:06 J -28354753.42 -28354753.37 -28354753.26 0.0064 0.0060

Earth -82339-07-19 18:42 J -28352696.97 -28352696.72 -28352696.46 0.0066 0.0019

Moon -82339-07-19 19:11 J -28352696.92 -28352696.70 -28352696.44 0.0066 0.0022 \*

Mercury -82264-08-10 02:23 J -28325281.45 -28325281.40 -28325281.33 0.0085 0.0076

Mercury -82264-11-06 03:49 J -28325193.42 -28325193.34 -28325193.25 0.0084 0.0064

Mercury -82263-02-02 05:16 J -28325105.38 -28325105.28 -28325105.17 0.0084 0.0052

Mercury -82263-05-01 06:28 J -28325017.34 -28325017.23 -28325017.10 0.0084 0.0040

Mercury -82263-07-28 07:54 J -28324929.29 -28324929.17 -28324929.04 0.0084 0.0028

Mercury -82263-10-24 09:06 J -28324841.24 -28324841.12 -28324840.98 0.0084 0.0017

Mercury -82262-01-20 10:32 J -28324753.19 -28324753.06 -28324752.92 0.0084 0.0005

Mercury -82262-04-18 11:59 J -28324665.14 -28324665.00 -28324664.87 0.0084 0.0007

Mercury -82262-07-15 13:11 J -28324577.08 -28324576.95 -28324576.82 0.0084 0.0018

Mercury -82262-10-11 14:23 J -28324489.02 -28324488.90 -28324488.77 0.0083 0.0029

Mercury -82261-01-07 15:35 J -28324400.96 -28324400.85 -28324400.72 0.0083 0.0041

Mercury -82261-04-04 17:01 J -28324312.89 -28324312.79 -28324312.68 0.0083 0.0051

Mercury -82261-07-01 18:13 J -28324224.82 -28324224.74 -28324224.65 0.0083 0.0062

Mercury -82261-09-27 19:40 J -28324136.74 -28324136.68 -28324136.62 0.0083 0.0073

Venus -82258-12-21 08:08 J -28322957.32 -28322957.16 -28322956.97 0.0081 0.0048

Venus -82257-08-02 18:13 J -28322731.94 -28322731.74 -28322731.52 0.0081 0.0013

Venus -82256-03-16 03:49 J -28322506.41 -28322506.34 -28322506.22 0.0081 0.0072

Moon -82252-01-23 18:28 J -28321096.97 -28321096.73 -28321096.48 0.0078 0.0005

Earth -82252-01-23 20:08 J -28321096.91 -28321096.66 -28321096.41 0.0078 0.0005 \*

Mercury -82111-03-03 06:42 J -28269558.23 -28269558.22 -28269558.18 0.0060 0.0060

Mercury -82111-05-30 08:08 J -28269470.23 -28269470.16 -28269470.06 0.0060 0.0054

Mercury -82111-08-26 09:35 J -28269382.21 -28269382.10 -28269381.98 0.0060 0.0048

Mercury -82111-11-22 11:01 J -28269294.17 -28269294.04 -28269293.90 0.0060 0.0042

Mercury -82110-02-18 12:13 J -28269206.13 -28269205.99 -28269205.82 0.0061 0.0036

Mercury -82110-05-17 13:40 J -28269118.08 -28269117.93 -28269117.75 0.0061 0.0030

Mercury -82110-08-13 15:06 J -28269030.04 -28269029.87 -28269029.68 0.0061 0.0024

Mercury -82110-11-09 16:32 J -28268941.98 -28268941.81 -28268941.61 0.0061 0.0018

Mercury -82109-02-05 18:13 J -28268853.93 -28268853.74 -28268853.55 0.0061 0.0011

Mercury -82109-05-03 19:40 J -28268765.87 -28268765.68 -28268765.49 0.0061 0.0005

Mercury -82109-07-30 21:06 J -28268677.81 -28268677.62 -28268677.43 0.0061 0.0001

Mercury -82109-10-26 22:18 J -28268589.75 -28268589.57 -28268589.37 0.0061 0.0008

Mercury -82108-01-22 23:44 J -28268501.69 -28268501.51 -28268501.31 0.0061 0.0014

Mercury -82108-04-21 01:11 J -28268413.62 -28268413.45 -28268413.26 0.0061 0.0020

Mercury -82108-07-18 02:52 J -28268325.55 -28268325.38 -28268325.21 0.0061 0.0027

Mercury -82108-10-14 03:49 J -28268237.48 -28268237.34 -28268237.16 0.0061 0.0034

Mercury -82107-01-10 05:30 J -28268149.40 -28268149.27 -28268149.11 0.0061 0.0040

Mercury -82107-04-08 07:11 J -28268061.32 -28268061.20 -28268061.07 0.0061 0.0046

Mercury -82107-07-05 08:23 J -28267973.23 -28267973.15 -28267973.03 0.0061 0.0053

Mercury -82107-10-01 10:04 J -28267885.12 -28267885.08 -28267885.02 0.0062 0.0059

Venus -82100-02-22 21:20 J -28265548.79 -28265548.61 -28265548.41 0.0064 0.0036

Venus -82100-10-06 02:08 J -28265323.63 -28265323.41 -28265323.18 0.0064 0.0006

Venus -82099-05-19 06:42 J -28265098.41 -28265098.22 -28265097.99 0.0064 0.0025

Venus -82099-12-30 11:16 J -28264873.11 -28264873.03 -28264872.89 0.0064 0.0057

Earth	-82093-07-20 18:56 J	-28262843.95	-28262843.71	-28262843.44	0.0066	0.0014
Moon	-82093-07-20 22:32 J	-28262843.81	-28262843.56	-28262843.29	0.0066	0.0017 *
Mercury	-82018-07-06 16:32 J	-28235464.83	-28235464.81	-28235464.78	0.0085	0.0083
Mercury	-82018-10-02 17:59 J	-28235376.82	-28235376.75	-28235376.68	0.0085	0.0071
Mercury	-82018-12-29 19:25 J	-28235288.79	-28235288.69	-28235288.60	0.0084	0.0059
Mercury	-82017-03-26 20:23 J	-28235200.75	-28235200.65	-28235200.53	0.0084	0.0048
Mercury	-82017-06-22 21:49 J	-28235112.70	-28235112.59	-28235112.46	0.0084	0.0036
Mercury	-82017-09-18 23:16 J	-28235024.65	-28235024.53	-28235024.40	0.0084	0.0024
Mercury	-82017-12-16 00:42 J	-28234936.60	-28234936.47	-28234936.34	0.0084	0.0012
Mercury	-82016-03-14 01:54 J	-28234848.55	-28234848.42	-28234848.28	0.0084	0.0003
Mercury	-82016-06-10 03:20 J	-28234760.50	-28234760.36	-28234760.23	0.0084	0.0011
Mercury	-82016-09-06 04:32 J	-28234672.44	-28234672.31	-28234672.18	0.0084	0.0022
Mercury	-82016-12-03 05:44 J	-28234584.38	-28234584.26	-28234584.13	0.0083	0.0034
Mercury	-82015-03-01 07:11 J	-28234496.31	-28234496.20	-28234496.09	0.0083	0.0045
Mercury	-82015-05-28 08:08 J	-28234408.25	-28234408.16	-28234408.05	0.0083	0.0056
Mercury	-82015-08-24 09:20 J	-28234320.17	-28234320.11	-28234320.02	0.0083	0.0067
Mercury	-82015-11-20 10:32 J	-28234232.09	-28234232.06	-28234232.00	0.0083	0.0078
Venus	-82011-01-18 16:32 J	-28233076.96	-28233076.81	-28233076.63	0.0081	0.0052
Venus	-82011-09-01 02:52 J	-28232851.59	-28232851.38	-28232851.16	0.0081	0.0007
Venus	-82010-04-14 12:42 J	-28232626.08	-28232625.97	-28232625.84	0.0080	0.0066
Earth	-82006-01-25 19:40 J	-28231243.93	-28231243.68	-28231243.43	0.0078	0.0003
Moon	-82006-01-25 23:16 J	-28231243.78	-28231243.53	-28231243.28	0.0078	0.0001 *

# 82ND MILLENNIUM BCE

This is a list of transits visible from Pluto in the 82nd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-81865-04-24 19:25 J	-28179653.70	-28179653.69	-28179653.62	0.0060	0.0059		
Mercury	-81865-07-21 20:52 J	-28179565.70	-28179565.63	-28179565.52	0.0060	0.0053		
Mercury	-81865-10-17 22:18 J	-28179477.67	-28179477.57	-28179477.43	0.0060	0.0047		
Mercury	-81864-01-14 00:13 J	-28179389.63	-28179389.49	-28179389.35	0.0060	0.0041		
Mercury	-81864-04-12 01:40 J	-28179301.59	-28179301.43	-28179301.27	0.0060	0.0035		
Mercury	-81864-07-09 02:52 J	-28179213.54	-28179213.38	-28179213.20	0.0061	0.0029		
Mercury	-81864-10-05 04:18 J	-28179125.49	-28179125.32	-28179125.14	0.0061	0.0023		
Mercury	-81863-01-01 05:44 J	-28179037.44	-28179037.26	-28179037.07	0.0061	0.0017		
Mercury	-81863-03-30 07:11 J	-28178949.38	-28178949.20	-28178949.01	0.0061	0.0011		
Mercury	-81863-06-26 08:37 J	-28178861.33	-28178861.14	-28178860.94	0.0061	0.0005		
Mercury	-81863-09-22 10:04 J	-28178773.27	-28178773.08	-28178772.88	0.0061	0.0002		
Mercury	-81863-12-19 11:30 J	-28178685.21	-28178685.02	-28178684.82	0.0061	0.0008		
Mercury	-81862-03-17 12:56 J	-28178597.14	-28178596.96	-28178596.77	0.0061	0.0015		
Mercury	-81862-06-13 14:08 J	-28178509.07	-28178508.91	-28178508.71	0.0061	0.0021		
Mercury	-81862-09-09 15:35 J	-28178421.01	-28178420.85	-28178420.66	0.0061	0.0028		
Mercury	-81862-12-06 17:16 J	-28178332.93	-28178332.78	-28178332.61	0.0061	0.0034		
Mercury	-81861-03-03 18:28 J	-28178244.86	-28178244.73	-28178244.56	0.0061	0.0040		
Mercury	-81861-05-30 19:54 J	-28178156.77	-28178156.67	-28178156.52	0.0061	0.0047		
Mercury	-81861-08-26 21:49 J	-28178068.68	-28178068.59	-28178068.49	0.0061	0.0053		
Mercury	-81861-11-22 22:47 J	-28177980.57	-28177980.55	-28177980.48	0.0062	0.0060		
Venus	-81854-03-24 03:35 J	-28175668.50	-28175668.35	-28175668.19	0.0064	0.0045		
Venus	-81854-11-04 08:08 J	-28175443.37	-28175443.16	-28175442.93	0.0064	0.0015		
Venus	-81853-06-16 12:42 J	-28175218.17	-28175217.97	-28175217.73	0.0064	0.0016		
Venus	-81852-01-27 17:44 J	-28174992.91	-28174992.76	-28174992.60	0.0064	0.0047		
Moon	-81847-07-22 13:25 J	-28172991.18	-28172990.94	-28172990.66	0.0066	0.0021		
Earth	-81847-07-22 15:49 J	-28172991.08	-28172990.84	-28172990.57	0.0066	0.0018	*	
Mars	-81845-03-14 10:32 J	-28172390.28	-28172390.06	-28172389.81	0.0067	0.0049		

Mercury -81772-08-28 06:56 J -28145560.23 -28145560.21 -28145560.16 0.0085 0.0082

Mercury -81772-11-24 08:23 J -28145472.21 -28145472.15 -28145472.06 0.0085 0.0070

Mercury -81771-02-20 10:04 J -28145384.18 -28145384.08 -28145383.98 0.0084 0.0058

Mercury -81771-05-19 11:16 J -28145296.14 -28145296.03 -28145295.91 0.0084 0.0046

Mercury -81771-08-15 12:42 J -28145208.09 -28145207.97 -28145207.85 0.0084 0.0034

Mercury -81771-11-11 13:54 J -28145120.04 -28145119.92 -28145119.78 0.0084 0.0023

Mercury -81770-02-07 15:20 J -28145031.99 -28145031.86 -28145031.73 0.0084 0.0011

Mercury -81770-05-06 16:47 J -28144943.94 -28144943.80 -28144943.67 0.0084 0.0002

Mercury -81770-08-02 17:59 J -28144855.88 -28144855.75 -28144855.62 0.0084 0.0012

Mercury -81770-10-29 19:11 J -28144767.82 -28144767.70 -28144767.57 0.0084 0.0023

Mercury -81769-01-25 20:23 J -28144679.76 -28144679.65 -28144679.52 0.0083 0.0035

Mercury -81769-04-22 21:49 J -28144591.70 -28144591.59 -28144591.48 0.0083 0.0046

Mercury -81769-07-19 23:01 J -28144503.63 -28144503.54 -28144503.44 0.0083 0.0057

Mercury -81769-10-15 23:59 J -28144415.56 -28144415.50 -28144415.41 0.0083 0.0068

Mercury -81768-01-12 01:11 J -28144327.47 -28144327.45 -28144327.39 0.0083 0.0079

Venus -81765-02-16 22:32 J -28143196.67 -28143196.56 -28143196.41 0.0081 0.0065

Venus -81765-09-29 09:06 J -28142971.33 -28142971.12 -28142970.90 0.0081 0.0005

Venus -81764-05-12 18:42 J -28142745.86 -28142745.72 -28142745.54 0.0081 0.0054

Moon -81760-01-26 15:49 J -28141391.09 -28141390.84 -28141390.57 0.0078 0.0010

Earth -81760-01-26 15:49 J -28141391.08 -28141390.84 -28141390.58 0.0078 0.0012 \*

Mercury -81619-06-17 08:37 J -28089749.16 -28089749.14 -28089749.11 0.0060 0.0060

Mercury -81619-09-13 10:04 J -28089661.16 -28089661.08 -28089661.00 0.0060 0.0054

Mercury -81619-12-10 11:30 J -28089573.14 -28089573.02 -28089572.91 0.0060 0.0048

Mercury -81618-03-08 12:42 J -28089485.10 -28089484.97 -28089484.83 0.0060 0.0042

Mercury -81618-06-04 14:08 J -28089397.06 -28089396.91 -28089396.75 0.0060 0.0036

Mercury -81618-08-31 15:20 J -28089309.02 -28089308.86 -28089308.68 0.0061 0.0030

Mercury -81618-11-27 16:47 J -28089220.97 -28089220.80 -28089220.62 0.0061 0.0024

Mercury -81617-02-23 18:13 J -28089132.92 -28089132.74 -28089132.55 0.0061 0.0018

Mercury -81617-05-21 19:40 J -28089044.86 -28089044.68 -28089044.49 0.0061 0.0012

Mercury -81617-08-17 21:06 J -28088956.81 -28088956.62 -28088956.42 0.0061 0.0006

Mercury -81617-11-13 22:32 J -28088868.75 -28088868.56 -28088868.36 0.0061 0.0001  
 Mercury -81616-02-09 23:59 J -28088780.69 -28088780.50 -28088780.30 0.0061 0.0007  
 Mercury -81616-05-09 01:25 J -28088692.62 -28088692.44 -28088692.25 0.0061 0.0013  
 Mercury -81616-08-05 02:37 J -28088604.56 -28088604.39 -28088604.19 0.0061 0.0020  
 Mercury -81616-11-01 04:04 J -28088516.49 -28088516.33 -28088516.14 0.0061 0.0026  
 Mercury -81615-01-28 05:30 J -28088428.42 -28088428.27 -28088428.09 0.0061 0.0033  
 Mercury -81615-04-26 07:11 J -28088340.34 -28088340.20 -28088340.04 0.0061 0.0039  
 Mercury -81615-07-23 08:23 J -28088252.26 -28088252.15 -28088252.00 0.0061 0.0045  
 Mercury -81615-10-19 10:04 J -28088164.17 -28088164.08 -28088163.97 0.0061 0.0052  
 Mercury -81614-01-15 11:01 J -28088076.07 -28088076.04 -28088075.95 0.0061 0.0059  
 Venus -81608-04-21 07:54 J -28085788.24 -28085788.17 -28085788.05 0.0063 0.0058  
 Venus -81608-12-02 12:42 J -28085563.16 -28085562.97 -28085562.75 0.0064 0.0028  
 Venus -81607-07-15 17:44 J -28085337.99 -28085337.76 -28085337.54 0.0064 0.0003  
 Venus -81606-02-25 21:49 J -28085112.76 -28085112.59 -28085112.37 0.0064 0.0034  
 Moon -81601-07-23 07:40 J -28083138.39 -28083138.18 -28083137.93 0.0066 0.0031  
 Earth -81601-07-23 10:18 J -28083138.30 -28083138.07 -28083137.83 0.0066 0.0029 \*  
 Mars -81599-08-04 23:16 J -28082395.83 -28082395.53 -28082395.17 0.0067 0.0020  
 Mercury -81525-01-16 21:49 J -28055567.64 -28055567.59 -28055567.52 0.0085 0.0076  
 Mercury -81525-04-13 23:16 J -28055479.61 -28055479.53 -28055479.43 0.0084 0.0064  
 Mercury -81525-07-11 00:42 J -28055391.57 -28055391.47 -28055391.36 0.0084 0.0052  
 Mercury -81525-10-07 01:54 J -28055303.53 -28055303.42 -28055303.29 0.0084 0.0041  
 Mercury -81524-01-03 03:35 J -28055215.48 -28055215.35 -28055215.22 0.0084 0.0028  
 Mercury -81524-04-01 04:47 J -28055127.43 -28055127.30 -28055127.16 0.0084 0.0017  
 Mercury -81524-06-28 06:13 J -28055039.38 -28055039.24 -28055039.11 0.0084 0.0005  
 Mercury -81524-09-24 07:25 J -28054951.32 -28054951.19 -28054951.05 0.0084 0.0007  
 Mercury -81524-12-21 08:52 J -28054863.26 -28054863.13 -28054863.00 0.0084 0.0018  
 Mercury -81523-03-19 10:04 J -28054775.20 -28054775.08 -28054774.95 0.0083 0.0029  
 Mercury -81523-06-15 11:16 J -28054687.14 -28054687.03 -28054686.91 0.0083 0.0040  
 Mercury -81523-09-11 12:28 J -28054599.08 -28054598.98 -28054598.87 0.0083 0.0051  
 Mercury -81523-12-08 13:40 J -28054511.01 -28054510.93 -28054510.83 0.0083 0.0062



Mercury -81522-03-06 14:52 J -28054422.93 -28054422.88 -28054422.80 0.0083 0.0073

Venus -81519-10-28 11:44 J -28053091.20 -28053091.01 -28053090.81 0.0081 0.0031

Venus -81518-06-10 21:35 J -28052865.79 -28052865.60 -28052865.39 0.0081 0.0028

Moon -81514-01-28 02:52 J -28051538.58 -28051538.38 -28051538.16 0.0079 0.0041

Earth -81514-01-28 05:44 J -28051538.45 -28051538.26 -28051538.03 0.0079 0.0045 \*

Mercury -81373-11-04 21:35 J -27999756.64 -27999756.60 -27999756.51 0.0060 0.0057

Mercury -81372-01-31 23:01 J -27999668.62 -27999668.54 -27999668.41 0.0060 0.0051

Mercury -81372-04-30 00:28 J -27999580.59 -27999580.48 -27999580.33 0.0060 0.0045

Mercury -81372-07-27 01:54 J -27999492.55 -27999492.42 -27999492.25 0.0060 0.0039

Mercury -81372-10-23 03:20 J -27999404.51 -27999404.36 -27999404.18 0.0061 0.0033

Mercury -81371-01-19 04:47 J -27999316.46 -27999316.30 -27999316.11 0.0061 0.0027

Mercury -81371-04-17 06:13 J -27999228.41 -27999228.24 -27999228.05 0.0061 0.0021

Mercury -81371-07-14 07:54 J -27999140.36 -27999140.17 -27999139.98 0.0061 0.0014

Mercury -81371-10-10 09:20 J -27999052.30 -27999052.11 -27999051.92 0.0061 0.0008

Mercury -81370-01-06 10:47 J -27998964.24 -27998964.05 -27998963.86 0.0061 0.0002

Mercury -81370-04-04 11:59 J -27998876.18 -27998876.00 -27998875.80 0.0061 0.0005

Mercury -81370-07-01 13:25 J -27998788.12 -27998787.94 -27998787.74 0.0061 0.0011

Mercury -81370-09-27 14:52 J -27998700.06 -27998699.88 -27998699.69 0.0061 0.0017

Mercury -81370-12-24 16:18 J -27998611.99 -27998611.82 -27998611.64 0.0061 0.0023

Mercury -81369-03-21 17:44 J -27998523.92 -27998523.76 -27998523.58 0.0061 0.0030

Mercury -81369-06-17 18:56 J -27998435.85 -27998435.71 -27998435.54 0.0061 0.0036

Mercury -81369-09-13 20:23 J -27998347.77 -27998347.65 -27998347.49 0.0061 0.0043

Mercury -81369-12-10 22:04 J -27998259.68 -27998259.58 -27998259.45 0.0061 0.0049

Mercury -81368-03-08 23:16 J -27998171.59 -27998171.53 -27998171.43 0.0061 0.0056

Venus -81362-12-31 17:01 J -27995682.95 -27995682.79 -27995682.61 0.0064 0.0042

Venus -81361-08-12 21:35 J -27995457.81 -27995457.60 -27995457.36 0.0064 0.0012

Venus -81360-03-26 02:08 J -27995232.61 -27995232.41 -27995232.17 0.0064 0.0020

Venus -81360-11-06 07:25 J -27995007.33 -27995007.19 -27995007.05 0.0064 0.0050

Earth -81355-07-25 03:20 J -27993285.53 -27993285.36 -27993285.13 0.0066 0.0044

Moon -81355-07-25 06:28 J -27993285.39 -27993285.23 -27993285.00 0.0066 0.0044 \*

Moon -81354-07-26 15:06 J -27992919.01 -27992918.87 -27992918.70 0.0066 0.0053  
 Earth -81354-07-26 18:42 J -27992918.85 -27992918.72 -27992918.54 0.0066 0.0054 \*  
 Mars -81353-12-25 10:47 J -27992401.38 -27992401.05 -27992400.69 0.0067 0.0007  
 Mercury -81279-03-10 11:44 J -27965663.05 -27965663.01 -27965662.96 0.0085 0.0080  
 Mercury -81279-06-06 13:11 J -27965575.03 -27965574.95 -27965574.87 0.0085 0.0068  
 Mercury -81279-09-02 14:23 J -27965486.99 -27965486.90 -27965486.79 0.0084 0.0056  
 Mercury -81279-11-29 15:49 J -27965398.95 -27965398.84 -27965398.72 0.0084 0.0044  
 Mercury -81278-02-25 17:16 J -27965310.90 -27965310.78 -27965310.65 0.0084 0.0033  
 Mercury -81278-05-24 18:28 J -27965222.85 -27965222.73 -27965222.59 0.0084 0.0021  
 Mercury -81278-08-20 19:54 J -27965134.80 -27965134.67 -27965134.54 0.0084 0.0010  
 Mercury -81278-11-16 21:20 J -27965046.75 -27965046.61 -27965046.48 0.0084 0.0003  
 Mercury -81277-02-12 22:32 J -27964958.69 -27964958.56 -27964958.43 0.0084 0.0013  
 Mercury -81277-05-10 23:44 J -27964870.63 -27964870.51 -27964870.38 0.0084 0.0025  
 Mercury -81277-08-07 01:11 J -27964782.57 -27964782.45 -27964782.33 0.0083 0.0036  
 Mercury -81277-11-03 02:23 J -27964694.51 -27964694.40 -27964694.29 0.0083 0.0047  
 Mercury -81276-01-30 03:20 J -27964606.44 -27964606.36 -27964606.25 0.0083 0.0058  
 Mercury -81276-04-28 04:32 J -27964518.37 -27964518.31 -27964518.22 0.0083 0.0069  
 Mercury -81276-07-25 05:44 J -27964430.27 -27964430.26 -27964430.21 0.0083 0.0080  
 Venus -81273-11-25 14:52 J -27963211.02 -27963210.88 -27963210.70 0.0081 0.0055  
 Venus -81272-07-09 01:11 J -27962985.66 -27962985.45 -27962985.23 0.0081 0.0005  
 Venus -81271-02-19 10:47 J -27962760.17 -27962760.05 -27962759.90 0.0080 0.0062  
 Earth -81268-01-28 21:06 J -27961685.70 -27961685.62 -27961685.49 0.0079 0.0072  
 Moon -81268-01-28 23:59 J -27961685.61 -27961685.50 -27961685.37 0.0079 0.0068 \*  
 Mercury -81127-12-28 09:35 J -27909852.11 -27909852.10 -27909852.04 0.0060 0.0059  
 Mercury -81126-03-26 11:01 J -27909764.11 -27909764.04 -27909763.93 0.0060 0.0053  
 Mercury -81126-06-22 12:28 J -27909676.08 -27909675.98 -27909675.84 0.0060 0.0047  
 Mercury -81126-09-18 13:54 J -27909588.04 -27909587.92 -27909587.76 0.0060 0.0041  
 Mercury -81126-12-15 15:20 J -27909500.00 -27909499.86 -27909499.69 0.0060 0.0036  
 Mercury -81125-03-12 16:47 J -27909411.95 -27909411.80 -27909411.62 0.0061 0.0030  
 Mercury -81125-06-08 18:13 J -27909323.91 -27909323.74 -27909323.55 0.0061 0.0023

Mercury -81125-09-04 19:25 J -27909235.86 -27909235.69 -27909235.49 0.0061 0.0018

Mercury -81125-12-01 21:20 J -27909147.80 -27909147.61 -27909147.42 0.0061 0.0011

Mercury -81124-02-27 22:47 J -27909059.74 -27909059.55 -27909059.36 0.0061 0.0005

Mercury -81124-05-26 23:59 J -27908971.69 -27908971.50 -27908971.30 0.0061 0.0002

Mercury -81124-08-23 01:25 J -27908883.63 -27908883.44 -27908883.24 0.0061 0.0008

Mercury -81124-11-19 02:37 J -27908795.56 -27908795.39 -27908795.19 0.0061 0.0014

Mercury -81123-02-15 04:04 J -27908707.50 -27908707.33 -27908707.13 0.0061 0.0020

Mercury -81123-05-14 05:30 J -27908619.43 -27908619.27 -27908619.08 0.0061 0.0027

Mercury -81123-08-10 07:11 J -27908531.36 -27908531.20 -27908531.03 0.0061 0.0032

Mercury -81123-11-06 08:08 J -27908443.28 -27908443.16 -27908442.99 0.0061 0.0040

Mercury -81122-02-02 09:49 J -27908355.20 -27908355.09 -27908354.94 0.0061 0.0045

Mercury -81122-05-01 11:30 J -27908267.11 -27908267.02 -27908266.91 0.0061 0.0052

Mercury -81122-07-28 12:28 J -27908179.01 -27908178.98 -27908178.89 0.0061 0.0059

Venus -81115-01-28 19:54 J -27905802.73 -27905802.67 -27905802.55 0.0064 0.0059

Venus -81115-09-11 00:42 J -27905577.65 -27905577.47 -27905577.24 0.0064 0.0029

Venus -81114-04-24 06:13 J -27905352.47 -27905352.24 -27905352.02 0.0064 0.0002

Venus -81114-12-05 10:18 J -27905127.24 -27905127.07 -27905126.85 0.0064 0.0034

Venus -81113-07-17 15:49 J -27904901.87 -27904901.84 -27904901.82 0.0064 0.0064

Moon -81109-07-25 19:25 J -27903432.77 -27903432.69 -27903432.54 0.0066 0.0060

Earth -81109-07-25 20:37 J -27903432.73 -27903432.64 -27903432.55 0.0066 0.0061 \*

Earth -81108-07-27 11:01 J -27903066.24 -27903066.04 -27903065.80 0.0066 0.0036

Moon -81108-07-27 12:42 J -27903066.17 -27903065.97 -27903065.73 0.0066 0.0034 \*

Mars -81106-05-17 18:42 J -27902407.02 -27902406.72 -27902406.39 0.0067 0.0027

Mercury -81033-07-29 02:08 J -27875670.46 -27875670.41 -27875670.34 0.0085 0.0076

Mercury -81033-10-25 03:49 J -27875582.43 -27875582.34 -27875582.26 0.0084 0.0064

Mercury -81032-01-21 04:47 J -27875494.39 -27875494.30 -27875494.18 0.0084 0.0053

Mercury -81032-04-19 06:13 J -27875406.35 -27875406.24 -27875406.11 0.0084 0.0041

Mercury -81032-07-16 07:40 J -27875318.30 -27875318.18 -27875318.05 0.0084 0.0029

Mercury -81032-10-12 09:06 J -27875230.25 -27875230.12 -27875229.99 0.0084 0.0017

Mercury -81031-01-08 10:18 J -27875142.20 -27875142.07 -27875141.93 0.0084 0.0006

Mercury -81031-04-06 11:44 J -27875054.15 -27875054.01 -27875053.88 0.0084 0.0006

Mercury -81031-07-03 12:56 J -27874966.09 -27874965.96 -27874965.82 0.0084 0.0017

Mercury -81031-09-29 14:08 J -27874878.03 -27874877.91 -27874877.78 0.0083 0.0029

Mercury -81031-12-26 15:35 J -27874789.97 -27874789.85 -27874789.73 0.0083 0.0039

Mercury -81030-03-24 16:47 J -27874701.90 -27874701.80 -27874701.69 0.0083 0.0050

Mercury -81030-06-20 17:59 J -27874613.83 -27874613.75 -27874613.65 0.0083 0.0061

Mercury -81030-09-16 19:11 J -27874525.75 -27874525.70 -27874525.63 0.0083 0.0072

Venus -81026-08-07 02:37 J -27873105.59 -27873105.39 -27873105.19 0.0081 0.0026

Venus -81025-03-19 12:13 J -27872880.17 -27872879.99 -27872879.78 0.0080 0.0033

Earth -81021-02-01 10:47 J -27871466.23 -27871466.05 -27871465.82 0.0078 0.0047

Moon -81021-02-01 11:01 J -27871466.23 -27871466.04 -27871465.83 0.0078 0.0044 \*

# 81ST MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 81st millennium BCE.**

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
TRANSIT								
TIME								
Mercury	-80880-05-17	22:18 J	-27819859.60	-27819859.57	-27819859.51	0.0060	0.0058	
Mercury	-80880-08-13	23:44 J	-27819771.59	-27819771.51	-27819771.41	0.0060	0.0053	
Mercury	-80880-11-10	01:11 J	-27819683.56	-27819683.45	-27819683.32	0.0060	0.0047	
Mercury	-80879-02-06	02:37 J	-27819595.52	-27819595.39	-27819595.24	0.0060	0.0041	
Mercury	-80879-05-05	03:49 J	-27819507.48	-27819507.34	-27819507.17	0.0060	0.0035	
Mercury	-80879-08-01	05:16 J	-27819419.44	-27819419.28	-27819419.10	0.0061	0.0029	
Mercury	-80879-10-28	06:42 J	-27819331.39	-27819331.22	-27819331.03	0.0061	0.0023	

Mercury -80878-01-24 08:08 J -27819243.34 -27819243.16 -27819242.97 0.0061 0.0017  
 Mercury -80878-04-22 09:35 J -27819155.28 -27819155.10 -27819154.90 0.0061 0.0011  
 Mercury -80878-07-19 11:01 J -27819067.22 -27819067.04 -27819066.84 0.0061 0.0005  
 Mercury -80878-10-15 12:42 J -27818979.17 -27818978.97 -27818978.78 0.0061 0.0002  
 Mercury -80877-01-11 13:54 J -27818891.11 -27818890.92 -27818890.72 0.0061 0.0008  
 Mercury -80877-04-08 15:20 J -27818803.04 -27818802.86 -27818802.67 0.0061 0.0014  
 Mercury -80877-07-05 16:47 J -27818714.98 -27818714.80 -27818714.61 0.0061 0.0020  
 Mercury -80877-10-01 18:28 J -27818626.91 -27818626.73 -27818626.56 0.0061 0.0027  
 Mercury -80877-12-28 19:25 J -27818538.84 -27818538.69 -27818538.51 0.0061 0.0033  
 Mercury -80876-03-26 20:52 J -27818450.76 -27818450.63 -27818450.47 0.0061 0.0040  
 Mercury -80876-06-22 22:32 J -27818362.68 -27818362.56 -27818362.42 0.0061 0.0046  
 Mercury -80876-09-18 23:30 J -27818274.59 -27818274.52 -27818274.39 0.0061 0.0053  
 Mercury -80876-12-16 01:11 J -27818186.48 -27818186.45 -27818186.37 0.0061 0.0059  
 Venus -80869-10-09 02:37 J -27815697.52 -27815697.39 -27815697.23 0.0064 0.0049  
 Venus -80868-05-22 07:25 J -27815472.39 -27815472.19 -27815471.96 0.0064 0.0019  
 Venus -80867-01-02 12:13 J -27815247.20 -27815246.99 -27815246.75 0.0064 0.0012  
 Venus -80867-08-15 17:01 J -27815021.94 -27815021.79 -27815021.61 0.0064 0.0043  
 Earth -80862-07-29 01:25 J -27813213.70 -27813213.44 -27813213.17 0.0066 0.0010  
 Moon -80862-07-29 03:35 J -27813213.61 -27813213.35 -27813213.06 0.0066 0.0008 \*  
 Mars -80860-10-06 19:25 J -27812412.95 -27812412.69 -27812412.36 0.0067 0.0036  
 Mercury -80787-09-20 15:20 J -27785765.86 -27785765.86 -27785765.86 0.0085 0.0085  
 Mercury -80787-12-17 16:32 J -27785677.87 -27785677.81 -27785677.73 0.0085 0.0073  
 Mercury -80786-03-15 17:44 J -27785589.84 -27785589.76 -27785589.65 0.0084 0.0062  
 Mercury -80786-06-11 19:11 J -27785501.80 -27785501.70 -27785501.58 0.0084 0.0050  
 Mercury -80786-09-07 20:52 J -27785413.75 -27785413.63 -27785413.51 0.0084 0.0038  
 Mercury -80786-12-04 22:04 J -27785325.70 -27785325.58 -27785325.45 0.0084 0.0026  
 Mercury -80785-03-01 23:16 J -27785237.65 -27785237.53 -27785237.39 0.0084 0.0015  
 Mercury -80785-05-29 00:42 J -27785149.60 -27785149.47 -27785149.33 0.0084 0.0004  
 Mercury -80785-08-25 02:08 J -27785061.55 -27785061.41 -27785061.28 0.0084 0.0008  
 Mercury -80785-11-21 03:20 J -27784973.49 -27784973.36 -27784973.23 0.0084 0.0020

Mercury -80784-02-17 04:47 J -27784885.43 -27784885.30 -27784885.18 0.0083 0.0031  
 Mercury -80784-05-16 05:44 J -27784797.37 -27784797.26 -27784797.14 0.0083 0.0042  
 Mercury -80784-08-12 06:56 J -27784709.30 -27784709.21 -27784709.10 0.0083 0.0053  
 Mercury -80784-11-08 08:08 J -27784621.23 -27784621.16 -27784621.06 0.0083 0.0064  
 Mercury -80783-02-04 09:20 J -27784533.15 -27784533.11 -27784533.04 0.0083 0.0075  
 Venus -80780-09-04 02:52 J -27783225.50 -27783225.38 -27783225.21 0.0081 0.0059  
 Venus -80779-04-17 13:25 J -27783000.15 -27782999.94 -27782999.72 0.0081 0.0000  
 Venus -80779-11-28 23:16 J -27782774.67 -27782774.53 -27782774.38 0.0080 0.0058  
 Jupiter -80777-01-09 20:52 J -27782368.07 -27782367.63 -27782367.14 0.0080 0.0038  
 Earth -80775-02-01 23:16 J -27781613.78 -27781613.53 -27781613.27 0.0078 0.0006  
 Moon -80775-02-02 02:37 J -27781613.65 -27781613.39 -27781613.13 0.0078 0.0004 \*  
 Mars -80774-04-09 11:44 J -27781182.16 -27781182.01 -27781181.82 0.0078 0.0063  
 Mercury -80634-10-06 10:04 J -27729867.09 -27729867.08 -27729867.02 0.0060 0.0059  
 Mercury -80633-01-02 11:30 J -27729779.09 -27729779.02 -27729778.91 0.0060 0.0053  
 Mercury -80633-03-30 12:42 J -27729691.06 -27729690.97 -27729690.83 0.0060 0.0048  
 Mercury -80633-06-26 14:08 J -27729603.02 -27729602.91 -27729602.75 0.0060 0.0042  
 Mercury -80633-09-22 15:35 J -27729514.98 -27729514.85 -27729514.67 0.0060 0.0036  
 Mercury -80633-12-19 17:01 J -27729426.94 -27729426.79 -27729426.60 0.0061 0.0030  
 Mercury -80632-03-17 18:28 J -27729338.89 -27729338.73 -27729338.54 0.0061 0.0024  
 Mercury -80632-06-13 19:54 J -27729250.84 -27729250.67 -27729250.47 0.0061 0.0018  
 Mercury -80632-09-09 21:20 J -27729162.79 -27729162.61 -27729162.41 0.0061 0.0012  
 Mercury -80632-12-06 23:01 J -27729074.73 -27729074.54 -27729074.35 0.0061 0.0005  
 Mercury -80631-03-05 00:28 J -27728986.67 -27728986.48 -27728986.29 0.0061 0.0001  
 Mercury -80631-06-01 01:54 J -27728898.61 -27728898.42 -27728898.23 0.0061 0.0007  
 Mercury -80631-08-28 03:20 J -27728810.55 -27728810.36 -27728810.17 0.0061 0.0013  
 Mercury -80631-11-24 04:32 J -27728722.48 -27728722.31 -27728722.12 0.0061 0.0020  
 Mercury -80630-02-20 05:59 J -27728634.41 -27728634.25 -27728634.06 0.0061 0.0026  
 Mercury -80630-05-19 07:25 J -27728546.34 -27728546.19 -27728546.01 0.0061 0.0032  
 Mercury -80630-08-15 08:52 J -27728458.27 -27728458.13 -27728457.97 0.0061 0.0039  
 Mercury -80630-11-11 10:32 J -27728370.19 -27728370.06 -27728369.93 0.0061 0.0045

Mercury -80629-02-07 11:30 J -27728282.10 -27728282.02 -27728281.89 0.0061 0.0052

Mercury -80629-05-05 13:11 J -27728194.00 -27728193.95 -27728193.87 0.0061 0.0058

Venus -80622-06-20 07:54 J -27725592.32 -27725592.17 -27725591.98 0.0064 0.0043

Venus -80621-01-31 12:42 J -27725367.18 -27725366.97 -27725366.73 0.0064 0.0013

Venus -80621-09-12 17:30 J -27725141.97 -27725141.77 -27725141.54 0.0064 0.0018

Venus -80620-04-25 22:04 J -27724916.69 -27724916.58 -27724916.40 0.0064 0.0050

Moon -80616-07-29 09:35 J -27723361.33 -27723361.10 -27723360.84 0.0066 0.0026

Earth -80616-07-29 12:56 J -27723361.19 -27723360.96 -27723360.69 0.0066 0.0023 \*

Mars -80613-02-26 17:30 J -27722419.05 -27722418.77 -27722418.45 0.0067 0.0033

Mercury -80540-05-07 05:44 J -27695685.31 -27695685.26 -27695685.19 0.0085 0.0076

Mercury -80540-08-03 07:11 J -27695597.28 -27695597.20 -27695597.11 0.0084 0.0064

Mercury -80540-10-30 08:23 J -27695509.24 -27695509.15 -27695509.03 0.0084 0.0053

Mercury -80539-01-26 10:04 J -27695421.20 -27695421.08 -27695420.96 0.0084 0.0040

Mercury -80539-04-24 11:16 J -27695333.15 -27695333.03 -27695332.90 0.0084 0.0029

Mercury -80539-07-21 12:42 J -27695245.10 -27695244.97 -27695244.84 0.0084 0.0017

Mercury -80539-10-17 14:08 J -27695157.05 -27695156.91 -27695156.78 0.0084 0.0006

Mercury -80538-01-13 15:20 J -27695068.99 -27695068.86 -27695068.72 0.0084 0.0006

Mercury -80538-04-11 16:47 J -27694980.93 -27694980.80 -27694980.67 0.0084 0.0017

Mercury -80538-07-08 17:59 J -27694892.87 -27694892.75 -27694892.62 0.0083 0.0028

Mercury -80538-10-04 19:11 J -27694804.81 -27694804.70 -27694804.58 0.0083 0.0039

Mercury -80538-12-31 20:23 J -27694716.75 -27694716.65 -27694716.54 0.0083 0.0050

Mercury -80537-03-28 21:35 J -27694628.68 -27694628.60 -27694628.50 0.0083 0.0061

Mercury -80537-06-24 22:47 J -27694540.60 -27694540.55 -27694540.47 0.0083 0.0072

Mercury -80537-09-21 00:28 J -27694452.50 -27694452.48 -27694452.47 0.0083 0.0082

Venus -80533-05-15 10:32 J -27693120.22 -27693120.06 -27693119.86 0.0081 0.0044

Venus -80533-12-26 20:37 J -27692894.84 -27692894.64 -27692894.42 0.0080 0.0015

Venus -80532-08-09 06:13 J -27692669.32 -27692669.24 -27692669.13 0.0080 0.0072

Moon -80529-02-03 02:08 J -27691761.58 -27691761.41 -27691761.21 0.0079 0.0055

Earth -80529-02-03 05:01 J -27691761.45 -27691761.29 -27691761.10 0.0079 0.0056 \*

Mars -80528-08-30 00:42 J -27691187.53 -27691187.47 -27691187.33 0.0078 0.0073

Mercury -80387-05-22 22:18 J -27639786.60 -27639786.57 -27639786.48 0.0060 0.0058

Mercury -80387-08-18 23:44 J -27639698.58 -27639698.51 -27639698.39 0.0060 0.0052

Mercury -80387-11-15 01:11 J -27639610.55 -27639610.45 -27639610.30 0.0060 0.0046

Mercury -80386-02-11 02:37 J -27639522.52 -27639522.39 -27639522.23 0.0060 0.0040

Mercury -80386-05-10 04:04 J -27639434.47 -27639434.33 -27639434.16 0.0060 0.0034

Mercury -80386-08-06 05:30 J -27639346.43 -27639346.27 -27639346.09 0.0061 0.0028

Mercury -80386-11-02 06:56 J -27639258.38 -27639258.21 -27639258.02 0.0061 0.0022

Mercury -80385-01-29 08:23 J -27639170.33 -27639170.15 -27639169.96 0.0061 0.0016

Mercury -80385-04-26 09:49 J -27639082.27 -27639082.09 -27639081.90 0.0061 0.0010

Mercury -80385-07-23 11:16 J -27638994.22 -27638994.03 -27638993.83 0.0061 0.0004

Mercury -80385-10-19 12:42 J -27638906.16 -27638905.97 -27638905.78 0.0061 0.0003

Mercury -80384-01-15 14:08 J -27638818.10 -27638817.91 -27638817.72 0.0061 0.0009

Mercury -80384-04-13 15:20 J -27638730.03 -27638729.86 -27638729.66 0.0061 0.0015

Mercury -80384-07-10 16:47 J -27638641.97 -27638641.80 -27638641.61 0.0061 0.0022

Mercury -80384-10-06 18:28 J -27638553.90 -27638553.73 -27638553.56 0.0061 0.0028

Mercury -80383-01-02 19:25 J -27638465.83 -27638465.69 -27638465.51 0.0061 0.0034

Mercury -80383-03-31 20:52 J -27638377.75 -27638377.63 -27638377.46 0.0061 0.0041

Mercury -80383-06-27 22:32 J -27638289.67 -27638289.56 -27638289.42 0.0061 0.0047

Mercury -80383-09-24 00:13 J -27638201.58 -27638201.49 -27638201.39 0.0061 0.0053

Mercury -80383-12-21 01:11 J -27638113.47 -27638113.45 -27638113.38 0.0061 0.0060

Venus -80375-02-28 10:32 J -27635487.20 -27635487.06 -27635486.87 0.0064 0.0044

Venus -80375-10-11 15:35 J -27635262.06 -27635261.85 -27635261.62 0.0064 0.0013

Venus -80374-05-24 20:37 J -27635036.85 -27635036.64 -27635036.41 0.0064 0.0018

Venus -80373-01-05 01:25 J -27634811.58 -27634811.44 -27634811.28 0.0064 0.0049

Moon -80369-07-31 09:20 J -27633142.35 -27633142.11 -27633141.87 0.0066 0.0032

Earth -80369-07-31 11:16 J -27633142.26 -27633142.03 -27633141.78 0.0066 0.0030 \*

Mars -80367-07-18 04:18 J -27632425.67 -27632425.32 -27632424.97 0.0067 0.0010

Mercury -80294-09-25 18:13 J -27605692.76 -27605692.74 -27605692.70 0.0085 0.0083

Mercury -80294-12-22 19:40 J -27605604.75 -27605604.68 -27605604.60 0.0084 0.0071

Mercury -80293-03-19 20:52 J -27605516.71 -27605516.63 -27605516.52 0.0084 0.0059



Mercury -80293-06-15 22:18 J -27605428.67 -27605428.57 -27605428.45 0.0084 0.0048

Mercury -80293-09-11 23:59 J -27605340.62 -27605340.50 -27605340.38 0.0084 0.0036

Mercury -80293-12-09 01:11 J -27605252.58 -27605252.45 -27605252.32 0.0084 0.0024

Mercury -80292-03-07 02:37 J -27605164.52 -27605164.39 -27605164.26 0.0084 0.0013

Mercury -80292-06-03 03:49 J -27605076.47 -27605076.34 -27605076.20 0.0084 0.0003

Mercury -80292-08-30 05:16 J -27604988.41 -27604988.28 -27604988.15 0.0084 0.0010

Mercury -80292-11-26 06:28 J -27604900.36 -27604900.23 -27604900.10 0.0083 0.0021

Mercury -80291-02-22 07:40 J -27604812.30 -27604812.18 -27604812.05 0.0083 0.0033

Mercury -80291-05-21 09:06 J -27604724.23 -27604724.12 -27604724.00 0.0083 0.0043

Mercury -80291-08-17 10:18 J -27604636.17 -27604636.07 -27604635.96 0.0083 0.0054

Mercury -80291-11-13 11:30 J -27604548.09 -27604548.02 -27604547.93 0.0083 0.0065

Mercury -80290-02-09 12:42 J -27604460.01 -27604459.97 -27604459.91 0.0083 0.0076

Venus -80286-01-24 16:18 J -27603015.01 -27603014.82 -27603014.63 0.0081 0.0037

Venus -80286-09-07 02:08 J -27602789.62 -27602789.41 -27602789.20 0.0080 0.0021

Venus -80285-04-19 11:44 J -27602564.05 -27602564.01 -27602563.95 0.0080 0.0077

Moon -80282-02-05 09:06 J -27601542.37 -27601542.12 -27601541.87 0.0078 0.0026

Earth -80282-02-05 09:20 J -27601542.33 -27601542.11 -27601541.86 0.0078 0.0029 \*

Mercury -80140-01-06 10:18 J -27549706.12 -27549706.07 -27549705.99 0.0060 0.0057

Mercury -80140-04-04 11:59 J -27549618.10 -27549618.00 -27549617.90 0.0060 0.0051

Mercury -80140-07-01 13:25 J -27549530.07 -27549529.94 -27549529.81 0.0060 0.0045

Mercury -80140-09-27 14:08 J -27549442.03 -27549441.91 -27549441.74 0.0060 0.0040

Mercury -80140-12-24 15:35 J -27549353.99 -27549353.85 -27549353.67 0.0060 0.0034

Mercury -80139-03-22 17:01 J -27549265.94 -27549265.79 -27549265.60 0.0061 0.0028

Mercury -80139-06-18 18:28 J -27549177.89 -27549177.73 -27549177.53 0.0061 0.0022

Mercury -80139-09-14 19:54 J -27549089.84 -27549089.67 -27549089.47 0.0061 0.0016

Mercury -80139-12-11 21:20 J -27549001.79 -27549001.61 -27549001.41 0.0061 0.0010

Mercury -80138-03-09 23:01 J -27548913.73 -27548913.54 -27548913.35 0.0061 0.0003

Mercury -80138-06-06 00:28 J -27548825.67 -27548825.48 -27548825.29 0.0061 0.0003

Mercury -80138-09-02 01:54 J -27548737.61 -27548737.42 -27548737.23 0.0061 0.0009

Mercury -80138-11-29 03:06 J -27548649.55 -27548649.37 -27548649.18 0.0061 0.0015

Mercury -80137-02-25 04:47 J -27548561.48 -27548561.30 -27548561.12 0.0061 0.0021  
 Mercury -80137-05-23 05:44 J -27548473.41 -27548473.26 -27548473.07 0.0061 0.0028  
 Mercury -80137-08-19 07:11 J -27548385.34 -27548385.20 -27548385.02 0.0061 0.0034  
 Mercury -80137-11-15 08:37 J -27548297.27 -27548297.14 -27548296.98 0.0061 0.0041  
 Mercury -80136-02-11 10:18 J -27548209.19 -27548209.07 -27548208.94 0.0061 0.0047  
 Mercury -80136-05-10 11:16 J -27548121.10 -27548121.03 -27548120.91 0.0061 0.0054  
 Mercury -80136-08-06 12:56 J -27548032.99 -27548032.96 -27548032.90 0.0061 0.0060  
 Venus -80129-11-08 12:13 J -27545382.13 -27545381.99 -27545381.82 0.0064 0.0047  
 Venus -80128-06-21 17:01 J -27545156.99 -27545156.79 -27545156.55 0.0064 0.0017  
 Venus -80127-02-01 21:49 J -27544931.80 -27544931.59 -27544931.35 0.0064 0.0015  
 Venus -80127-09-15 02:52 J -27544706.53 -27544706.38 -27544706.21 0.0064 0.0045  
 Moon -80123-08-01 14:52 J -27543290.11 -27543289.88 -27543289.63 0.0066 0.0021  
 Earth -80123-08-01 16:18 J -27543290.06 -27543289.82 -27543289.56 0.0066 0.0022 \*  
 Mars -80121-12-06 10:32 J -27542432.36 -27542432.06 -27542431.71 0.0067 0.0024  
 Mercury -80047-05-12 07:11 J -27515612.21 -27515612.20 -27515612.18 0.0085 0.0084  
 Mercury -80047-08-08 08:37 J -27515524.21 -27515524.14 -27515524.07 0.0084 0.0072  
 Mercury -80047-11-04 09:49 J -27515436.17 -27515436.09 -27515435.99 0.0084 0.0060  
 Mercury -80046-01-31 11:16 J -27515348.13 -27515348.03 -27515347.91 0.0084 0.0049  
 Mercury -80046-04-29 12:42 J -27515260.09 -27515259.97 -27515259.85 0.0084 0.0037  
 Mercury -80046-07-26 14:08 J -27515172.04 -27515171.91 -27515171.78 0.0084 0.0025  
 Mercury -80046-10-22 15:20 J -27515083.99 -27515083.86 -27515083.72 0.0084 0.0014  
 Mercury -80045-01-18 16:47 J -27514995.93 -27514995.80 -27514995.66 0.0084 0.0003  
 Mercury -80045-04-15 18:13 J -27514907.88 -27514907.74 -27514907.61 0.0084 0.0009  
 Mercury -80045-07-12 19:25 J -27514819.82 -27514819.69 -27514819.56 0.0083 0.0020  
 Mercury -80045-10-08 20:37 J -27514731.76 -27514731.64 -27514731.51 0.0083 0.0031  
 Mercury -80044-01-04 21:49 J -27514643.70 -27514643.59 -27514643.47 0.0083 0.0042  
 Mercury -80044-04-02 23:01 J -27514555.63 -27514555.54 -27514555.43 0.0083 0.0053  
 Mercury -80044-06-30 00:13 J -27514467.56 -27514467.49 -27514467.39 0.0083 0.0064  
 Mercury -80044-09-26 01:25 J -27514379.48 -27514379.44 -27514379.37 0.0083 0.0075  
 Venus -80040-10-04 17:59 J -27512909.92 -27512909.75 -27512909.56 0.0081 0.0043

Venus	-80039-05-18 03:49 J	-27512684.54	-27512684.34	-27512684.12	0.0080	0.0016
Venus	-80039-12-29 13:11 J	-27512459.02	-27512458.95	-27512458.83	0.0080	0.0072
Moon	-80036-02-05 03:49 J	-27511690.44	-27511690.34	-27511690.20	0.0079	0.0069
Earth	-80036-02-05 06:28 J	-27511690.34	-27511690.23	-27511690.06	0.0079	0.0065 *

# 80TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 80th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-79894-08-23 20:37 J	-27459625.65	-27459625.64	-27459625.59	0.0060	0.0060		
Mercury	-79894-11-19 22:18 J	-27459537.65	-27459537.57	-27459537.48	0.0060	0.0054		
Mercury	-79893-02-15 23:16 J	-27459449.62	-27459449.53	-27459449.39	0.0060	0.0048		
Mercury	-79893-05-14 00:42 J	-27459361.59	-27459361.47	-27459361.31	0.0060	0.0042		
Mercury	-79893-08-10 02:08 J	-27459273.55	-27459273.41	-27459273.24	0.0060	0.0036		
Mercury	-79893-11-06 03:35 J	-27459185.50	-27459185.35	-27459185.17	0.0060	0.0031		
Mercury	-79892-02-02 05:01 J	-27459097.45	-27459097.29	-27459097.10	0.0061	0.0025		
Mercury	-79892-05-01 06:28 J	-27459009.40	-27459009.23	-27459009.04	0.0061	0.0019		
Mercury	-79892-07-28 07:54 J	-27458921.35	-27458921.17	-27458920.98	0.0061	0.0013		
Mercury	-79892-10-24 09:20 J	-27458833.29	-27458833.11	-27458832.91	0.0061	0.0007		
Mercury	-79891-01-20 10:47 J	-27458745.24	-27458745.05	-27458744.85	0.0061	0.0001		
Mercury	-79891-04-18 12:13 J	-27458657.18	-27458656.99	-27458656.80	0.0061	0.0006		
Mercury	-79891-07-15 13:40 J	-27458569.12	-27458568.93	-27458568.74	0.0061	0.0012		
Mercury	-79891-10-11 14:52 J	-27458481.05	-27458480.88	-27458480.69	0.0061	0.0018		

Mercury -79890-01-07 16:18 J -27458392.99 -27458392.82 -27458392.63 0.0061 0.0024

Mercury -79890-04-05 17:44 J -27458304.92 -27458304.76 -27458304.58 0.0061 0.0031

Mercury -79890-07-02 19:25 J -27458216.84 -27458216.69 -27458216.54 0.0061 0.0037

Mercury -79890-09-28 20:23 J -27458128.76 -27458128.65 -27458128.49 0.0061 0.0043

Mercury -79890-12-25 21:49 J -27458040.68 -27458040.59 -27458040.46 0.0061 0.0050

Mercury -79889-03-22 23:30 J -27457952.59 -27457952.52 -27457952.43 0.0061 0.0056

Venus -79882-07-20 10:47 J -27455277.12 -27455277.05 -27455276.93 0.0064 0.0058

Venus -79881-03-01 16:04 J -27455052.03 -27455051.83 -27455051.62 0.0064 0.0027

Venus -79881-10-12 20:52 J -27454826.85 -27454826.63 -27454826.40 0.0064 0.0003

Venus -79880-05-26 01:54 J -27454601.61 -27454601.42 -27454601.22 0.0064 0.0034

Moon -79876-08-03 05:01 J -27453071.53 -27453071.29 -27453071.02 0.0066 0.0012

Earth -79876-08-03 08:23 J -27453071.41 -27453071.15 -27453070.89 0.0066 0.0011 \*

Mercury -79800-03-24 20:37 J -27425443.69 -27425443.64 -27425443.59 0.0085 0.0078

Mercury -79800-06-20 21:49 J -27425355.66 -27425355.59 -27425355.50 0.0084 0.0066

Mercury -79800-09-16 23:16 J -27425267.62 -27425267.53 -27425267.42 0.0084 0.0055

Mercury -79800-12-14 00:28 J -27425179.58 -27425179.48 -27425179.35 0.0084 0.0044

Mercury -79799-03-12 02:08 J -27425091.53 -27425091.41 -27425091.28 0.0084 0.0031

Mercury -79799-06-08 03:20 J -27425003.48 -27425003.36 -27425003.22 0.0084 0.0020

Mercury -79799-09-04 04:47 J -27424915.43 -27424915.30 -27424915.16 0.0084 0.0008

Mercury -79799-12-01 06:13 J -27424827.38 -27424827.24 -27424827.11 0.0084 0.0003

Mercury -79798-02-27 07:25 J -27424739.32 -27424739.19 -27424739.06 0.0084 0.0014

Mercury -79798-05-26 08:37 J -27424651.26 -27424651.14 -27424651.01 0.0083 0.0026

Mercury -79798-08-22 09:49 J -27424563.20 -27424563.09 -27424562.96 0.0083 0.0037

Mercury -79798-11-18 11:16 J -27424475.14 -27424475.03 -27424474.92 0.0083 0.0047

Mercury -79797-02-14 12:28 J -27424387.07 -27424386.98 -27424386.88 0.0083 0.0058

Mercury -79797-05-12 13:40 J -27424298.99 -27424298.93 -27424298.85 0.0083 0.0069

Mercury -79797-08-08 14:52 J -27424210.90 -27424210.88 -27424210.83 0.0083 0.0080

Venus -79793-06-14 17:16 J -27422804.93 -27422804.78 -27422804.63 0.0081 0.0056

Venus -79792-01-26 03:06 J -27422579.58 -27422579.37 -27422579.15 0.0080 0.0002

Venus -79792-09-08 12:28 J -27422354.11 -27422353.98 -27422353.82 0.0080 0.0058

Moon -79789-02-07 22:18 J -27421471.81 -27421471.57 -27421471.31 0.0079 0.0011  
 Earth -79789-02-08 01:54 J -27421471.66 -27421471.42 -27421471.16 0.0079 0.0014 \*  
 Mercury -79647-07-06 07:54 J -27369457.20 -27369457.17 -27369457.10 0.0060 0.0058  
 Mercury -79647-10-02 09:20 J -27369369.18 -27369369.11 -27369369.00 0.0060 0.0052  
 Mercury -79647-12-29 10:47 J -27369281.15 -27369281.05 -27369280.91 0.0060 0.0047  
 Mercury -79646-03-27 12:13 J -27369193.12 -27369192.99 -27369192.84 0.0060 0.0041  
 Mercury -79646-06-23 13:40 J -27369105.08 -27369104.93 -27369104.77 0.0060 0.0035  
 Mercury -79646-09-19 15:06 J -27369017.03 -27369016.87 -27369016.70 0.0060 0.0029  
 Mercury -79646-12-16 16:32 J -27368928.98 -27368928.81 -27368928.63 0.0061 0.0023  
 Mercury -79645-03-13 17:59 J -27368840.93 -27368840.75 -27368840.57 0.0061 0.0017  
 Mercury -79645-06-09 19:25 J -27368752.88 -27368752.69 -27368752.50 0.0061 0.0011  
 Mercury -79645-09-05 20:52 J -27368664.82 -27368664.63 -27368664.44 0.0061 0.0005  
 Mercury -79645-12-02 22:04 J -27368576.77 -27368576.58 -27368576.38 0.0061 0.0002  
 Mercury -79644-02-28 23:30 J -27368488.71 -27368488.52 -27368488.33 0.0061 0.0007  
 Mercury -79644-05-28 00:56 J -27368400.64 -27368400.46 -27368400.27 0.0061 0.0013  
 Mercury -79644-08-24 02:23 J -27368312.58 -27368312.40 -27368312.22 0.0061 0.0019  
 Mercury -79644-11-20 03:49 J -27368224.51 -27368224.34 -27368224.16 0.0061 0.0026  
 Mercury -79643-02-16 04:47 J -27368136.44 -27368136.30 -27368136.11 0.0061 0.0032  
 Mercury -79643-05-15 06:13 J -27368048.37 -27368048.24 -27368048.07 0.0061 0.0039  
 Mercury -79643-08-11 07:54 J -27367960.29 -27367960.17 -27367960.03 0.0061 0.0044  
 Mercury -79643-11-07 09:20 J -27367872.20 -27367872.11 -27367871.99 0.0061 0.0051  
 Mercury -79642-02-03 11:01 J -27367784.10 -27367784.04 -27367783.97 0.0061 0.0057  
 Venus -79635-11-10 13:11 J -27364947.11 -27364946.95 -27364946.76 0.0064 0.0041  
 Venus -79634-06-23 18:28 J -27364721.95 -27364721.73 -27364721.51 0.0064 0.0011  
 Venus -79633-02-03 23:01 J -27364496.74 -27364496.54 -27364496.31 0.0064 0.0020  
 Venus -79633-09-16 03:35 J -27364271.46 -27364271.35 -27364271.18 0.0065 0.0052  
 Earth -79630-08-04 06:42 J -27363219.31 -27363219.22 -27363219.08 0.0066 0.0059  
 Moon -79630-08-04 10:04 J -27363219.20 -27363219.08 -27363218.93 0.0066 0.0056 \*  
 Moon -79629-08-04 17:59 J -27362852.96 -27362852.75 -27362852.50 0.0066 0.0034  
 Earth -79629-08-04 21:35 J -27362852.80 -27362852.60 -27362852.37 0.0066 0.0037 \*

Mercury -79553-02-05 09:06 J -27335275.17 -27335275.12 -27335275.06 0.0084 0.0077  
 Mercury -79553-05-03 10:18 J -27335187.14 -27335187.07 -27335186.97 0.0084 0.0065  
 Mercury -79553-07-30 11:44 J -27335099.11 -27335099.01 -27335098.90 0.0084 0.0054  
 Mercury -79553-10-26 13:11 J -27335011.06 -27335010.95 -27335010.83 0.0084 0.0042  
 Mercury -79552-01-22 14:37 J -27334923.01 -27334922.89 -27334922.76 0.0084 0.0030  
 Mercury -79552-04-20 16:04 J -27334834.96 -27334834.83 -27334834.70 0.0084 0.0019  
 Mercury -79552-07-17 17:16 J -27334746.91 -27334746.78 -27334746.64 0.0084 0.0008  
 Mercury -79552-10-13 18:42 J -27334658.86 -27334658.72 -27334658.59 0.0084 0.0004  
 Mercury -79551-01-09 19:54 J -27334570.80 -27334570.67 -27334570.53 0.0083 0.0015  
 Mercury -79551-04-07 21:06 J -27334482.74 -27334482.62 -27334482.48 0.0083 0.0026  
 Mercury -79551-07-04 22:18 J -27334394.68 -27334394.57 -27334394.44 0.0083 0.0037  
 Mercury -79551-09-30 23:30 J -27334306.62 -27334306.52 -27334306.40 0.0083 0.0048  
 Mercury -79551-12-28 00:42 J -27334218.55 -27334218.47 -27334218.36 0.0083 0.0059  
 Mercury -79550-03-26 02:23 J -27334130.47 -27334130.40 -27334130.33 0.0083 0.0069  
 Mercury -79550-06-22 03:35 J -27334042.38 -27334042.35 -27334042.32 0.0083 0.0080  
 Venus -79546-02-23 13:11 J -27332699.95 -27332699.95 -27332699.93 0.0081 0.0081  
 Venus -79546-10-06 23:16 J -27332474.73 -27332474.53 -27332474.32 0.0080 0.0023  
 Venus -79545-05-19 08:52 J -27332249.31 -27332249.13 -27332248.93 0.0080 0.0034  
 Moon -79542-02-09 12:56 J -27331253.20 -27331252.96 -27331252.69 0.0078 0.0019  
 Earth -79542-02-09 16:04 J -27331253.07 -27331252.83 -27331252.58 0.0078 0.0019 \*  
 Mars -79540-02-11 19:25 J -27330519.69 -27330519.69 -27330519.66 0.0077 0.0077  
 Mercury -79400-05-18 18:13 J -27279288.74 -27279288.74 -27279288.72 0.0060 0.0060  
 Mercury -79400-08-14 19:25 J -27279200.75 -27279200.69 -27279200.59 0.0060 0.0054  
 Mercury -79400-11-10 20:52 J -27279112.73 -27279112.63 -27279112.51 0.0060 0.0049  
 Mercury -79399-02-06 22:18 J -27279024.69 -27279024.57 -27279024.43 0.0060 0.0043  
 Mercury -79399-05-05 23:16 J -27278936.66 -27278936.53 -27278936.36 0.0060 0.0038  
 Mercury -79399-08-02 00:42 J -27278848.61 -27278848.47 -27278848.29 0.0060 0.0032  
 Mercury -79399-10-29 02:08 J -27278760.56 -27278760.41 -27278760.22 0.0060 0.0026  
 Mercury -79398-01-25 03:35 J -27278672.51 -27278672.35 -27278672.15 0.0061 0.0020  
 Mercury -79398-04-23 05:01 J -27278584.46 -27278584.29 -27278584.09 0.0061 0.0014

Mercury -79398-07-20 06:28 J -27278496.41 -27278496.23 -27278496.03 0.0061 0.0008  
 Mercury -79398-10-16 08:08 J -27278408.35 -27278408.16 -27278407.97 0.0061 0.0001  
 Mercury -79397-01-12 09:35 J -27278320.29 -27278320.10 -27278319.91 0.0061 0.0005  
 Mercury -79397-04-09 10:47 J -27278232.23 -27278232.05 -27278231.85 0.0061 0.0011  
 Mercury -79397-07-06 12:13 J -27278144.17 -27278143.99 -27278143.80 0.0061 0.0017  
 Mercury -79397-10-02 13:40 J -27278056.10 -27278055.93 -27278055.75 0.0061 0.0023  
 Mercury -79397-12-29 14:52 J -27277968.03 -27277967.88 -27277967.70 0.0061 0.0030  
 Mercury -79396-03-27 16:32 J -27277879.96 -27277879.81 -27277879.65 0.0061 0.0035  
 Mercury -79396-06-23 17:59 J -27277791.88 -27277791.75 -27277791.61 0.0061 0.0042  
 Mercury -79396-09-19 18:56 J -27277703.80 -27277703.71 -27277703.57 0.0061 0.0049  
 Mercury -79396-12-16 20:37 J -27277615.71 -27277615.64 -27277615.54 0.0061 0.0055  
 Mercury -79395-03-14 22:04 J -27277527.59 -27277527.58 -27277527.53 0.0061 0.0061  
 Venus -79388-07-21 07:40 J -27274842.20 -27274842.18 -27274842.09 0.0064 0.0062  
 Venus -79387-03-03 12:56 J -27274617.15 -27274616.96 -27274616.75 0.0064 0.0032  
 Venus -79387-10-14 17:59 J -27274391.97 -27274391.75 -27274391.52 0.0064 0.0001  
 Venus -79386-05-27 23:01 J -27274166.74 -27274166.54 -27274166.33 0.0064 0.0030  
 Venus -79385-01-08 04:04 J -27273941.40 -27273941.33 -27273941.25 0.0065 0.0061  
 Earth -79383-08-05 16:04 J -27273001.00 -27273000.83 -27273000.63 0.0066 0.0046  
 Moon -79383-08-05 17:30 J -27273000.92 -27273000.77 -27273000.58 0.0066 0.0049 \*  
 Moon -79382-08-07 04:04 J -27272634.47 -27272634.33 -27272634.16 0.0066 0.0054  
 Earth -79382-08-07 06:56 J -27272634.37 -27272634.21 -27272634.03 0.0066 0.0050 \*  
 Mercury -79307-12-18 20:37 J -27245106.67 -27245106.64 -27245106.60 0.0085 0.0081  
 Mercury -79306-03-16 21:49 J -27245018.65 -27245018.59 -27245018.50 0.0084 0.0070  
 Mercury -79306-06-12 23:30 J -27244930.61 -27244930.52 -27244930.42 0.0084 0.0057  
 Mercury -79306-09-09 00:56 J -27244842.57 -27244842.46 -27244842.35 0.0084 0.0046  
 Mercury -79306-12-06 02:08 J -27244754.53 -27244754.41 -27244754.28 0.0084 0.0034  
 Mercury -79305-03-03 03:35 J -27244666.48 -27244666.35 -27244666.22 0.0084 0.0023  
 Mercury -79305-05-30 05:01 J -27244578.42 -27244578.29 -27244578.16 0.0084 0.0011  
 Mercury -79305-08-26 06:13 J -27244490.37 -27244490.24 -27244490.10 0.0084 0.0003  
 Mercury -79305-11-22 07:40 J -27244402.31 -27244402.18 -27244402.05 0.0084 0.0011

Mercury -79304-02-18 08:52 J -27244314.26 -27244314.13 -27244314.00 0.0083 0.0022

Mercury -79304-05-17 10:04 J -27244226.19 -27244226.08 -27244225.95 0.0083 0.0033

Mercury -79304-08-13 11:16 J -27244138.13 -27244138.03 -27244137.90 0.0083 0.0045

Mercury -79304-11-09 12:42 J -27244050.06 -27244049.97 -27244049.86 0.0083 0.0055

Mercury -79303-02-05 13:54 J -27243961.99 -27243961.92 -27243961.83 0.0083 0.0066

Mercury -79303-05-04 15:20 J -27243873.91 -27243873.86 -27243873.81 0.0083 0.0076

Venus -79299-06-16 16:47 J -27242369.94 -27242369.80 -27242369.64 0.0081 0.0056

Venus -79298-01-28 02:52 J -27242144.60 -27242144.38 -27242144.17 0.0080 0.0002

Venus -79298-09-10 11:59 J -27241919.13 -27241919.00 -27241918.84 0.0080 0.0058

Moon -79295-02-11 00:13 J -27241034.71 -27241034.49 -27241034.24 0.0078 0.0037

Earth -79295-02-11 01:40 J -27241034.63 -27241034.43 -27241034.19 0.0078 0.0039 \*

Mars -79294-07-04 00:13 J -27240526.74 -27240526.49 -27240526.22 0.0078 0.0033

Mercury -79153-06-27 05:30 J -27189032.32 -27189032.27 -27189032.22 0.0060 0.0058

Mercury -79153-09-23 06:13 J -27188944.31 -27188944.24 -27188944.12 0.0060 0.0052

Mercury -79153-12-20 07:40 J -27188856.28 -27188856.18 -27188856.04 0.0060 0.0047

Mercury -79152-03-18 09:06 J -27188768.25 -27188768.12 -27188767.97 0.0060 0.0041

Mercury -79152-06-14 10:32 J -27188680.20 -27188680.06 -27188679.89 0.0060 0.0035

Mercury -79152-09-10 11:59 J -27188592.16 -27188592.00 -27188591.83 0.0060 0.0029

Mercury -79152-12-07 13:25 J -27188504.11 -27188503.94 -27188503.76 0.0060 0.0023

Mercury -79151-03-05 14:52 J -27188416.06 -27188415.88 -27188415.70 0.0061 0.0017

Mercury -79151-06-01 16:18 J -27188328.01 -27188327.82 -27188327.63 0.0061 0.0011

Mercury -79151-08-28 17:30 J -27188239.95 -27188239.77 -27188239.57 0.0061 0.0005

Mercury -79151-11-24 18:56 J -27188151.90 -27188151.71 -27188151.51 0.0061 0.0002

Mercury -79150-02-20 20:23 J -27188063.84 -27188063.65 -27188063.46 0.0061 0.0007

Mercury -79150-05-19 21:49 J -27187975.78 -27187975.59 -27187975.40 0.0061 0.0013

Mercury -79150-08-15 23:01 J -27187887.71 -27187887.54 -27187887.35 0.0061 0.0019

Mercury -79150-11-12 00:28 J -27187799.64 -27187799.48 -27187799.30 0.0061 0.0025

Mercury -79149-02-08 01:54 J -27187711.57 -27187711.42 -27187711.25 0.0061 0.0032

Mercury -79149-05-06 03:35 J -27187623.50 -27187623.35 -27187623.20 0.0061 0.0038

Mercury -79149-08-02 04:32 J -27187535.42 -27187535.31 -27187535.16 0.0061 0.0044



Mercury -79149-10-29 05:59 J -27187447.34 -27187447.25 -27187447.12 0.0061 0.0051

Mercury -79148-01-25 07:25 J -27187359.24 -27187359.19 -27187359.10 0.0061 0.0057

Venus -79141-11-11 06:28 J -27184512.32 -27184512.23 -27184512.10 0.0064 0.0055

Venus -79140-06-24 11:30 J -27184287.22 -27184287.02 -27184286.80 0.0064 0.0025

Venus -79139-02-04 16:32 J -27184062.03 -27184061.81 -27184061.58 0.0064 0.0006

Venus -79139-09-17 21:06 J -27183836.79 -27183836.62 -27183836.42 0.0065 0.0037

Moon -79136-08-06 22:18 J -27182782.75 -27182782.57 -27182782.33 0.0066 0.0038

Earth -79136-08-06 23:01 J -27182782.74 -27182782.54 -27182782.31 0.0066 0.0039 \*

Moon -79135-08-08 11:44 J -27182416.12 -27182416.01 -27182415.83 0.0066 0.0056

Earth -79135-08-08 13:40 J -27182416.05 -27182415.93 -27182415.79 0.0066 0.0058 \*

Mars -79133-05-15 18:42 J -27181770.02 -27181769.72 -27181769.37 0.0067 0.0026

Mercury -79059-01-27 08:37 J -27154850.18 -27154850.14 -27154850.08 0.0084 0.0078

Mercury -79059-04-25 09:49 J -27154762.16 -27154762.09 -27154761.99 0.0084 0.0067

Mercury -79059-07-22 11:30 J -27154674.12 -27154674.02 -27154673.91 0.0084 0.0054

Mercury -79059-10-18 12:42 J -27154586.08 -27154585.97 -27154585.84 0.0084 0.0043

Mercury -79058-01-14 14:23 J -27154498.03 -27154497.90 -27154497.78 0.0084 0.0031

Mercury -79058-04-12 15:35 J -27154409.98 -27154409.85 -27154409.72 0.0084 0.0020

Mercury -79058-07-09 17:01 J -27154321.93 -27154321.79 -27154321.66 0.0084 0.0009

Mercury -79058-10-05 18:13 J -27154233.87 -27154233.74 -27154233.60 0.0084 0.0004

Mercury -79057-01-01 19:40 J -27154145.81 -27154145.68 -27154145.55 0.0083 0.0014

Mercury -79057-03-29 20:52 J -27154057.75 -27154057.63 -27154057.50 0.0083 0.0025

Mercury -79057-06-25 22:18 J -27153969.69 -27153969.57 -27153969.45 0.0083 0.0036

Mercury -79057-09-21 23:30 J -27153881.63 -27153881.52 -27153881.41 0.0083 0.0046

Mercury -79057-12-19 00:42 J -27153793.56 -27153793.47 -27153793.37 0.0083 0.0057

Mercury -79056-03-17 01:54 J -27153705.48 -27153705.42 -27153705.33 0.0083 0.0068

Mercury -79056-06-13 03:06 J -27153617.40 -27153617.37 -27153617.32 0.0083 0.0079

Venus -79052-10-07 17:16 J -27152039.95 -27152039.78 -27152039.59 0.0080 0.0041

Venus -79051-05-21 03:20 J -27151814.57 -27151814.36 -27151814.15 0.0080 0.0015

Venus -79050-01-01 12:42 J -27151589.06 -27151588.97 -27151588.87 0.0080 0.0071

Earth -79048-02-12 07:25 J -27150816.41 -27150816.19 -27150815.97 0.0078 0.0040

Moon -79048-02-12 07:25 J -27150816.39 -27150816.19 -27150815.95 0.0078 0.0044 \*

# 79TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 79th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-78906-08-06 14:52 J	-27098775.90	-27098775.88	-27098775.85	0.0060	0.0060		
Mercury	-78906-11-02 15:35 J	-27098687.90	-27098687.85	-27098687.74	0.0060	0.0055		
Mercury	-78905-01-29 17:16 J	-27098599.88	-27098599.78	-27098599.65	0.0060	0.0048		
Mercury	-78905-04-26 18:42 J	-27098511.84	-27098511.72	-27098511.58	0.0060	0.0043		
Mercury	-78905-07-23 20:08 J	-27098423.80	-27098423.66	-27098423.50	0.0060	0.0037		
Mercury	-78905-10-19 21:35 J	-27098335.76	-27098335.60	-27098335.44	0.0060	0.0031		
Mercury	-78904-01-15 22:32 J	-27098247.71	-27098247.56	-27098247.37	0.0060	0.0026		
Mercury	-78904-04-13 23:59 J	-27098159.67	-27098159.50	-27098159.30	0.0061	0.0020		
Mercury	-78904-07-11 01:25 J	-27098071.61	-27098071.44	-27098071.24	0.0061	0.0014		
Mercury	-78904-10-07 02:52 J	-27097983.56	-27097983.38	-27097983.18	0.0061	0.0008		
Mercury	-78903-01-03 04:18 J	-27097895.51	-27097895.32	-27097895.12	0.0061	0.0002		
Mercury	-78903-04-01 05:44 J	-27097807.45	-27097807.26	-27097807.07	0.0061	0.0005		
Mercury	-78903-06-28 06:56 J	-27097719.39	-27097719.21	-27097719.01	0.0061	0.0011		
Mercury	-78903-09-24 08:23 J	-27097631.32	-27097631.15	-27097630.96	0.0061	0.0017		
Mercury	-78903-12-21 09:49 J	-27097543.26	-27097543.09	-27097542.90	0.0061	0.0023		
Mercury	-78902-03-19 11:01 J	-27097455.19	-27097455.04	-27097454.85	0.0061	0.0030		
Mercury	-78902-06-15 12:28 J	-27097367.12	-27097366.98	-27097366.81	0.0061	0.0036		

Mercury -78902-09-11 13:54 J -27097279.04 -27097278.92 -27097278.76 0.0061 0.0042

Mercury -78902-12-08 15:35 J -27097190.96 -27097190.85 -27097190.73 0.0061 0.0048

Mercury -78901-03-05 16:32 J -27097102.87 -27097102.81 -27097102.69 0.0061 0.0055

Mercury -78901-06-01 17:59 J -27097014.76 -27097014.75 -27097014.69 0.0061 0.0061

Venus -78893-03-04 01:40 J -27094182.51 -27094182.43 -27094182.32 0.0064 0.0057

Venus -78893-10-15 06:28 J -27093957.42 -27093957.23 -27093957.01 0.0064 0.0027

Venus -78892-05-28 11:44 J -27093732.23 -27093732.01 -27093731.78 0.0064 0.0004

Venus -78891-01-08 16:18 J -27093506.99 -27093506.82 -27093506.61 0.0065 0.0035

Moon -78889-08-07 22:04 J -27092564.73 -27092564.58 -27092564.37 0.0066 0.0048

Earth -78889-08-08 00:28 J -27092564.64 -27092564.48 -27092564.28 0.0066 0.0048 \*

Earth -78888-08-09 14:52 J -27092198.04 -27092197.88 -27092197.68 0.0066 0.0048

Moon -78888-08-09 14:52 J -27092198.04 -27092197.88 -27092197.66 0.0066 0.0047 \*

Mercury -78812-03-07 19:40 J -27064593.71 -27064593.68 -27064593.64 0.0084 0.0081

Mercury -78812-06-03 20:52 J -27064505.69 -27064505.63 -27064505.54 0.0084 0.0070

Mercury -78812-08-30 22:32 J -27064417.66 -27064417.56 -27064417.46 0.0084 0.0057

Mercury -78812-11-26 23:44 J -27064329.61 -27064329.51 -27064329.39 0.0084 0.0046

Mercury -78811-02-23 01:11 J -27064241.57 -27064241.45 -27064241.32 0.0084 0.0035

Mercury -78811-05-22 02:37 J -27064153.52 -27064153.39 -27064153.26 0.0084 0.0023

Mercury -78811-08-18 04:04 J -27064065.47 -27064065.33 -27064065.20 0.0084 0.0012

Mercury -78811-11-14 05:16 J -27063977.41 -27063977.28 -27063977.14 0.0084 0.0002

Mercury -78810-02-10 06:42 J -27063889.36 -27063889.22 -27063889.09 0.0083 0.0011

Mercury -78810-05-09 07:54 J -27063801.30 -27063801.17 -27063801.04 0.0083 0.0022

Mercury -78810-08-05 09:20 J -27063713.24 -27063713.11 -27063712.99 0.0083 0.0033

Mercury -78810-11-01 10:32 J -27063625.17 -27063625.06 -27063624.94 0.0083 0.0043

Mercury -78809-01-28 11:44 J -27063537.10 -27063537.01 -27063536.90 0.0083 0.0054

Mercury -78809-04-25 12:56 J -27063449.03 -27063448.96 -27063448.87 0.0083 0.0065

Mercury -78809-07-22 14:08 J -27063360.95 -27063360.91 -27063360.84 0.0083 0.0076

Venus -78804-01-28 14:37 J -27061710.07 -27061709.89 -27061709.69 0.0080 0.0039

Venus -78804-09-11 00:28 J -27061484.68 -27061484.48 -27061484.27 0.0080 0.0018

Venus -78803-04-24 09:35 J -27061259.16 -27061259.10 -27061259.00 0.0080 0.0074

Earth -78801-02-14 07:40 J -27060598.41 -27060598.18 -27060597.93 0.0079 0.0024  
 Moon -78801-02-14 10:04 J -27060598.33 -27060598.08 -27060597.83 0.0079 0.0020 \*  
 Mars -78799-03-04 14:08 J -27059849.02 -27059848.91 -27059848.73 0.0077 0.0067  
 Mercury -78659-12-12 00:56 J -27008431.51 -27008431.46 -27008431.41 0.0060 0.0058  
 Mercury -78658-03-10 01:40 J -27008343.50 -27008343.43 -27008343.31 0.0060 0.0052  
 Mercury -78658-06-06 03:06 J -27008255.47 -27008255.37 -27008255.23 0.0060 0.0047  
 Mercury -78658-09-02 04:32 J -27008167.44 -27008167.31 -27008167.16 0.0060 0.0041  
 Mercury -78658-11-29 06:13 J -27008079.39 -27008079.24 -27008079.09 0.0060 0.0035  
 Mercury -78657-02-25 07:11 J -27007991.35 -27007991.20 -27007991.02 0.0060 0.0029  
 Mercury -78657-05-23 08:37 J -27007903.30 -27007903.14 -27007902.95 0.0060 0.0024  
 Mercury -78657-08-19 10:04 J -27007815.25 -27007815.08 -27007814.89 0.0061 0.0018  
 Mercury -78657-11-15 11:30 J -27007727.20 -27007727.02 -27007726.83 0.0061 0.0012  
 Mercury -78656-02-11 12:56 J -27007639.15 -27007638.96 -27007638.77 0.0061 0.0006  
 Mercury -78656-05-10 14:23 J -27007551.09 -27007550.90 -27007550.71 0.0061 0.0001  
 Mercury -78656-08-06 15:35 J -27007463.03 -27007462.85 -27007462.65 0.0061 0.0007  
 Mercury -78656-11-02 17:01 J -27007374.97 -27007374.79 -27007374.60 0.0061 0.0013  
 Mercury -78655-01-29 18:13 J -27007286.91 -27007286.74 -27007286.54 0.0061 0.0019  
 Mercury -78655-04-27 19:40 J -27007198.84 -27007198.68 -27007198.49 0.0061 0.0025  
 Mercury -78655-07-24 20:52 J -27007110.77 -27007110.63 -27007110.44 0.0061 0.0032  
 Mercury -78655-10-20 22:18 J -27007022.70 -27007022.57 -27007022.40 0.0061 0.0037  
 Mercury -78654-01-16 23:44 J -27006934.62 -27006934.51 -27006934.35 0.0061 0.0044  
 Mercury -78654-04-15 01:11 J -27006846.54 -27006846.45 -27006846.32 0.0061 0.0050  
 Mercury -78654-07-12 02:52 J -27006758.45 -27006758.38 -27006758.29 0.0061 0.0056  
 Venus -78646-06-25 19:11 J -27003852.70 -27003852.70 -27003852.67 0.0064 0.0064  
 Venus -78645-02-05 23:44 J -27003627.68 -27003627.51 -27003627.30 0.0064 0.0034  
 Venus -78645-09-18 05:01 J -27003402.51 -27003402.29 -27003402.06 0.0064 0.0003  
 Venus -78644-05-01 09:49 J -27003177.28 -27003177.09 -27003176.87 0.0065 0.0028  
 Venus -78644-12-12 14:52 J -27002951.96 -27002951.88 -27002951.77 0.0065 0.0059  
 Earth -78642-08-09 23:16 J -27002346.53 -27002346.53 -27002346.50 0.0065 0.0065  
 Earth -78641-08-10 13:25 J -27001980.16 -27001979.94 -27001979.69 0.0066 0.0030

Moon -78641-08-10 15:20 J -27001980.09 -27001979.86 -27001979.62 0.0066 0.0033 \*  
 Mars -78638-01-13 03:35 J -27001094.69 -27001094.35 -27001094.00 0.0067 0.0015  
 Mercury -78565-07-13 06:56 J -26974249.25 -26974249.21 -26974249.16 0.0084 0.0079  
 Mercury -78565-10-09 08:08 J -26974161.23 -26974161.16 -26974161.07 0.0084 0.0068  
 Mercury -78564-01-05 09:49 J -26974073.19 -26974073.09 -26974072.99 0.0084 0.0056  
 Mercury -78564-04-03 11:01 J -26973985.15 -26973985.04 -26973984.92 0.0084 0.0044  
 Mercury -78564-06-30 12:13 J -26973897.10 -26973896.99 -26973896.86 0.0084 0.0033  
 Mercury -78564-09-26 13:40 J -26973809.05 -26973808.93 -26973808.79 0.0084 0.0022  
 Mercury -78564-12-23 15:06 J -26973721.00 -26973720.87 -26973720.73 0.0084 0.0010  
 Mercury -78563-03-21 16:32 J -26973632.95 -26973632.81 -26973632.68 0.0084 0.0002  
 Mercury -78563-06-17 17:44 J -26973544.89 -26973544.76 -26973544.62 0.0083 0.0012  
 Mercury -78563-09-13 18:56 J -26973456.83 -26973456.71 -26973456.57 0.0083 0.0024  
 Mercury -78563-12-10 20:23 J -26973368.77 -26973368.65 -26973368.53 0.0083 0.0034  
 Mercury -78562-03-08 21:35 J -26973280.71 -26973280.60 -26973280.48 0.0083 0.0045  
 Mercury -78562-06-04 22:47 J -26973192.64 -26973192.55 -26973192.44 0.0083 0.0056  
 Mercury -78562-08-31 23:59 J -26973104.57 -26973104.50 -26973104.41 0.0083 0.0067  
 Mercury -78562-11-28 01:25 J -26973016.48 -26973016.44 -26973016.39 0.0083 0.0077  
 Venus -78557-05-21 07:40 J -26971380.33 -26971380.18 -26971379.99 0.0080 0.0048  
 Venus -78556-01-01 17:44 J -26971154.97 -26971154.76 -26971154.54 0.0080 0.0009  
 Venus -78556-08-15 03:06 J -26970929.49 -26970929.37 -26970929.23 0.0079 0.0064  
 Earth -78554-02-15 01:40 J -26970380.67 -26970380.43 -26970380.17 0.0079 0.0016  
 Moon -78554-02-15 04:47 J -26970380.54 -26970380.30 -26970380.03 0.0079 0.0015 \*  
 Mercury -78411-07-15 10:04 J -26917999.14 -26917999.08 -26917999.00 0.0060 0.0055  
 Mercury -78411-10-11 11:30 J -26917911.12 -26917911.02 -26917910.91 0.0060 0.0050  
 Mercury -78410-01-07 12:28 J -26917823.09 -26917822.98 -26917822.83 0.0060 0.0044  
 Mercury -78410-04-05 13:54 J -26917735.05 -26917734.92 -26917734.76 0.0060 0.0039  
 Mercury -78410-07-02 15:20 J -26917647.01 -26917646.86 -26917646.69 0.0060 0.0033  
 Mercury -78410-09-28 17:01 J -26917558.96 -26917558.79 -26917558.62 0.0060 0.0027  
 Mercury -78410-12-25 18:28 J -26917470.91 -26917470.73 -26917470.55 0.0060 0.0021  
 Mercury -78409-03-22 19:25 J -26917382.86 -26917382.69 -26917382.49 0.0061 0.0016

Mercury -78409-06-18 20:52 J -26917294.81 -26917294.63 -26917294.43 0.0061 0.0010

Mercury -78409-09-14 22:32 J -26917206.75 -26917206.56 -26917206.37 0.0061 0.0003

Mercury -78409-12-11 23:44 J -26917118.69 -26917118.51 -26917118.31 0.0061 0.0003

Mercury -78408-03-10 01:11 J -26917030.63 -26917030.45 -26917030.26 0.0061 0.0009

Mercury -78408-06-06 02:23 J -26916942.57 -26916942.40 -26916942.20 0.0061 0.0015

Mercury -78408-09-02 03:49 J -26916854.51 -26916854.34 -26916854.15 0.0061 0.0021

Mercury -78408-11-29 05:01 J -26916766.44 -26916766.29 -26916766.10 0.0061 0.0027

Mercury -78407-02-25 06:28 J -26916678.37 -26916678.23 -26916678.05 0.0061 0.0033

Mercury -78407-05-24 07:54 J -26916590.30 -26916590.17 -26916590.01 0.0061 0.0039

Mercury -78407-08-20 09:20 J -26916502.22 -26916502.11 -26916501.97 0.0061 0.0045

Mercury -78407-11-16 10:47 J -26916414.14 -26916414.05 -26916413.93 0.0061 0.0052

Mercury -78406-02-12 12:13 J -26916326.04 -26916325.99 -26916325.91 0.0061 0.0058

Venus -78398-05-29 12:42 J -26913298.09 -26913297.97 -26913297.81 0.0064 0.0051

Venus -78397-01-09 17:59 J -26913072.96 -26913072.75 -26913072.53 0.0064 0.0021

Venus -78397-08-21 22:32 J -26912847.77 -26912847.56 -26912847.32 0.0065 0.0011

Venus -78396-04-04 03:49 J -26912622.51 -26912622.34 -26912622.16 0.0065 0.0041

Earth -78394-08-12 05:01 J -26911762.54 -26911762.29 -26911762.02 0.0066 0.0009

Moon -78394-08-12 07:25 J -26911762.44 -26911762.19 -26911761.90 0.0066 0.0012 \*

Mercury -78317-02-14 17:44 J -26883816.81 -26883816.76 -26883816.69 0.0084 0.0074

Mercury -78317-05-12 19:11 J -26883728.78 -26883728.70 -26883728.60 0.0084 0.0062

Mercury -78317-08-08 20:37 J -26883640.74 -26883640.64 -26883640.53 0.0084 0.0051

Mercury -78317-11-04 22:04 J -26883552.70 -26883552.58 -26883552.46 0.0084 0.0039

Mercury -78316-01-31 23:16 J -26883464.65 -26883464.53 -26883464.39 0.0084 0.0028

Mercury -78316-04-30 00:42 J -26883376.60 -26883376.47 -26883376.33 0.0084 0.0017

Mercury -78316-07-27 02:08 J -26883288.54 -26883288.41 -26883288.27 0.0084 0.0005

Mercury -78316-10-23 03:20 J -26883200.49 -26883200.36 -26883200.22 0.0084 0.0007

Mercury -78315-01-19 04:47 J -26883112.43 -26883112.30 -26883112.17 0.0083 0.0017

Mercury -78315-04-17 05:59 J -26883024.37 -26883024.25 -26883024.12 0.0083 0.0028

Mercury -78315-07-14 07:11 J -26882936.31 -26882936.20 -26882936.07 0.0083 0.0039

Mercury -78315-10-10 08:23 J -26882848.24 -26882848.15 -26882848.03 0.0083 0.0050

Mercury -78314-01-06 09:35 J -26882760.17 -26882760.10 -26882759.99 0.0083 0.0061

Mercury -78314-04-04 11:01 J -26882672.10 -26882672.04 -26882671.96 0.0083 0.0071

Mercury -78314-07-01 12:13 J -26882584.00 -26882583.99 -26882583.96 0.0083 0.0082

Venus -78310-09-11 20:08 J -26881050.72 -26881050.66 -26881050.55 0.0080 0.0074

Venus -78309-04-24 06:13 J -26880825.44 -26880825.24 -26880825.02 0.0080 0.0017

Venus -78309-12-05 16:04 J -26880600.01 -26880599.83 -26880599.63 0.0080 0.0039

Moon -78307-02-15 16:32 J -26880162.84 -26880162.81 -26880162.78 0.0079 0.0078

Moon -78306-02-17 11:30 J -26879796.07 -26879796.02 -26879795.92 0.0078 0.0075

Earth -78306-02-17 14:08 J -26879795.93 -26879795.91 -26879795.87 0.0078 0.0078 \*

Mars -78305-11-01 17:01 J -26879172.98 -26879172.79 -26879172.54 0.0077 0.0051

Mercury -78163-02-15 17:59 J -26827566.79 -26827566.75 -26827566.65 0.0060 0.0056

Mercury -78163-05-14 19:25 J -26827478.77 -26827478.69 -26827478.56 0.0060 0.0051

Mercury -78163-08-10 21:06 J -26827390.74 -26827390.62 -26827390.49 0.0060 0.0044

Mercury -78163-11-06 22:32 J -26827302.70 -26827302.56 -26827302.41 0.0060 0.0039

Mercury -78162-02-02 23:30 J -26827214.66 -26827214.52 -26827214.34 0.0060 0.0033

Mercury -78162-05-02 00:56 J -26827126.61 -26827126.46 -26827126.28 0.0060 0.0028

Mercury -78162-07-29 02:23 J -26827038.57 -26827038.40 -26827038.21 0.0060 0.0022

Mercury -78162-10-25 03:49 J -26826950.52 -26826950.34 -26826950.15 0.0060 0.0016

Mercury -78161-01-21 05:16 J -26826862.46 -26826862.28 -26826862.09 0.0061 0.0010

Mercury -78161-04-18 06:42 J -26826774.41 -26826774.22 -26826774.03 0.0061 0.0004

Mercury -78161-07-15 08:08 J -26826686.35 -26826686.16 -26826685.97 0.0061 0.0002

Mercury -78161-10-11 09:20 J -26826598.29 -26826598.11 -26826597.91 0.0061 0.0008

Mercury -78160-01-07 10:47 J -26826510.23 -26826510.05 -26826509.86 0.0061 0.0014

Mercury -78160-04-05 11:59 J -26826422.17 -26826422.00 -26826421.81 0.0061 0.0020

Mercury -78160-07-02 13:25 J -26826334.10 -26826333.94 -26826333.76 0.0061 0.0026

Mercury -78160-09-28 14:37 J -26826246.03 -26826245.89 -26826245.71 0.0061 0.0033

Mercury -78160-12-25 16:04 J -26826157.96 -26826157.83 -26826157.66 0.0061 0.0038

Mercury -78159-03-23 17:30 J -26826069.88 -26826069.77 -26826069.62 0.0061 0.0045

Mercury -78159-06-19 18:56 J -26825981.80 -26825981.71 -26825981.58 0.0061 0.0051

Mercury -78159-09-15 20:37 J -26825893.70 -26825893.64 -26825893.56 0.0061 0.0057

Venus	-78150-05-02 04:04 J	-26822743.48	-26822743.33	-26822743.16	0.0064	0.0044
Venus	-78150-12-13 08:52 J	-26822518.34	-26822518.13	-26822517.89	0.0064	0.0015
Venus	-78149-07-25 13:54 J	-26822293.13	-26822292.92	-26822292.69	0.0065	0.0017
Venus	-78148-03-07 18:56 J	-26822067.85	-26822067.71	-26822067.55	0.0065	0.0048
Earth	-78147-08-12 15:49 J	-26821544.92	-26821544.84	-26821544.70	0.0065	0.0060
Moon	-78147-08-12 18:56 J	-26821544.77	-26821544.71	-26821544.57	0.0065	0.0061 *
Moon	-78146-08-14 04:18 J	-26821178.51	-26821178.32	-26821178.09	0.0066	0.0037
Earth	-78146-08-14 06:13 J	-26821178.43	-26821178.24	-26821177.99	0.0066	0.0036 *
Mars	-78144-09-09 09:20 J	-26820421.32	-26820421.11	-26820420.86	0.0067	0.0051
Mercury	-78070-09-18 03:06 J	-26793384.41	-26793384.37	-26793384.31	0.0084	0.0078
Mercury	-78070-12-15 04:18 J	-26793296.38	-26793296.32	-26793296.22	0.0084	0.0067
Mercury	-78069-03-12 05:59 J	-26793208.35	-26793208.25	-26793208.14	0.0084	0.0054
Mercury	-78069-06-08 07:11 J	-26793120.30	-26793120.20	-26793120.07	0.0084	0.0044
Mercury	-78069-09-04 08:52 J	-26793032.25	-26793032.13	-26793032.00	0.0084	0.0031
Mercury	-78069-12-01 10:18 J	-26792944.20	-26792944.07	-26792943.94	0.0084	0.0020
Mercury	-78068-02-27 11:30 J	-26792856.15	-26792856.02	-26792855.88	0.0084	0.0009
Mercury	-78068-05-26 12:56 J	-26792768.10	-26792767.96	-26792767.83	0.0084	0.0002
Mercury	-78068-08-22 14:08 J	-26792680.04	-26792679.91	-26792679.77	0.0083	0.0013
Mercury	-78068-11-18 15:20 J	-26792591.98	-26792591.86	-26792591.72	0.0083	0.0025
Mercury	-78067-02-14 16:47 J	-26792503.92	-26792503.80	-26792503.67	0.0083	0.0035
Mercury	-78067-05-13 17:59 J	-26792415.85	-26792415.75	-26792415.63	0.0083	0.0046
Mercury	-78067-08-09 19:11 J	-26792327.79	-26792327.70	-26792327.59	0.0083	0.0057
Mercury	-78067-11-05 20:37 J	-26792239.71	-26792239.64	-26792239.56	0.0083	0.0067
Mercury	-78066-02-01 21:49 J	-26792151.63	-26792151.59	-26792151.54	0.0083	0.0078
Venus	-78062-08-15 13:25 J	-26790496.07	-26790495.94	-26790495.78	0.0080	0.0059
Venus	-78061-03-27 23:30 J	-26790270.74	-26790270.52	-26790270.31	0.0080	0.0003
Venus	-78061-11-08 08:37 J	-26790045.28	-26790045.14	-26790044.96	0.0079	0.0053
Moon	-78059-02-17 13:40 J	-26789579.16	-26789578.93	-26789578.67	0.0079	0.0015
Earth	-78059-02-17 16:47 J	-26789579.04	-26789578.80	-26789578.55	0.0079	0.0018 *



# 78TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 78th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-77916-12-16 01:40 J	-26737046.47	-26737046.43	-26737046.33	0.0060	0.0056		
Mercury	-77915-03-14 03:20 J	-26736958.45	-26736958.36	-26736958.24	0.0060	0.0050		
Mercury	-77915-06-10 04:47 J	-26736870.41	-26736870.30	-26736870.16	0.0060	0.0044		
Mercury	-77915-09-06 06:28 J	-26736782.38	-26736782.23	-26736782.09	0.0060	0.0039		
Mercury	-77915-12-03 07:25 J	-26736694.33	-26736694.19	-26736694.02	0.0060	0.0033		
Mercury	-77914-03-01 08:52 J	-26736606.29	-26736606.13	-26736605.95	0.0060	0.0027		
Mercury	-77914-05-28 10:18 J	-26736518.24	-26736518.07	-26736517.89	0.0060	0.0022		
Mercury	-77914-08-24 11:44 J	-26736430.19	-26736430.01	-26736429.83	0.0060	0.0016		
Mercury	-77914-11-20 13:11 J	-26736342.14	-26736341.95	-26736341.76	0.0061	0.0010		
Mercury	-77913-02-16 14:23 J	-26736254.08	-26736253.90	-26736253.70	0.0061	0.0004		
Mercury	-77913-05-14 15:49 J	-26736166.03	-26736165.84	-26736165.65	0.0061	0.0002		
Mercury	-77913-08-10 17:16 J	-26736077.97	-26736077.78	-26736077.59	0.0061	0.0008		
Mercury	-77913-11-06 18:28 J	-26735989.91	-26735989.73	-26735989.54	0.0061	0.0014		
Mercury	-77912-02-02 19:40 J	-26735901.84	-26735901.68	-26735901.48	0.0061	0.0020		
Mercury	-77912-05-01 21:06 J	-26735813.78	-26735813.62	-26735813.43	0.0061	0.0026		
Mercury	-77912-07-28 22:18 J	-26735725.71	-26735725.57	-26735725.38	0.0061	0.0032		
Mercury	-77912-10-24 23:44 J	-26735637.64	-26735637.51	-26735637.34	0.0061	0.0038		
Mercury	-77911-01-21 01:11 J	-26735549.56	-26735549.45	-26735549.30	0.0061	0.0044		
Mercury	-77911-04-19 02:37 J	-26735461.48	-26735461.39	-26735461.26	0.0061	0.0050		

Mercury -77911-07-16 04:04 J -26735373.38 -26735373.33 -26735373.23 0.0061 0.0057

Venus -77902-04-04 14:52 J -26732189.01 -26732188.88 -26732188.72 0.0064 0.0049

Venus -77902-11-15 19:40 J -26731963.88 -26731963.68 -26731963.44 0.0064 0.0019

Venus -77901-06-28 00:56 J -26731738.67 -26731738.46 -26731738.23 0.0065 0.0013

Venus -77900-02-08 05:44 J -26731513.40 -26731513.26 -26731513.07 0.0065 0.0044

Moon -77899-08-14 08:08 J -26730961.37 -26730961.16 -26730960.95 0.0065 0.0039

Earth -77899-08-14 10:47 J -26730961.26 -26730961.05 -26730960.82 0.0065 0.0036 \*

Earth -77898-08-16 00:28 J -26730594.56 -26730594.48 -26730594.34 0.0066 0.0060

Moon -77898-08-16 02:08 J -26730594.46 -26730594.41 -26730594.31 0.0066 0.0063 \*

Mars -77896-12-18 13:25 J -26729739.26 -26729738.94 -26729738.60 0.0067 0.0025

Mercury -77822-07-18 12:13 J -26702864.03 -26702863.99 -26702863.93 0.0084 0.0079

Mercury -77822-10-14 13:54 J -26702776.01 -26702775.92 -26702775.84 0.0084 0.0067

Mercury -77821-01-10 15:06 J -26702687.97 -26702687.87 -26702687.76 0.0084 0.0055

Mercury -77821-04-07 16:18 J -26702599.92 -26702599.82 -26702599.69 0.0084 0.0044

Mercury -77821-07-04 17:59 J -26702511.88 -26702511.75 -26702511.63 0.0084 0.0032

Mercury -77821-09-30 19:25 J -26702423.83 -26702423.69 -26702423.56 0.0084 0.0021

Mercury -77821-12-27 20:37 J -26702335.77 -26702335.64 -26702335.50 0.0084 0.0010

Mercury -77820-03-25 22:04 J -26702247.72 -26702247.58 -26702247.45 0.0084 0.0002

Mercury -77820-06-21 23:16 J -26702159.66 -26702159.53 -26702159.39 0.0083 0.0012

Mercury -77820-09-18 00:28 J -26702071.60 -26702071.48 -26702071.34 0.0083 0.0024

Mercury -77820-12-15 01:54 J -26701983.54 -26701983.42 -26701983.29 0.0083 0.0034

Mercury -77819-03-13 03:06 J -26701895.48 -26701895.37 -26701895.25 0.0083 0.0045

Mercury -77819-06-09 04:18 J -26701807.41 -26701807.32 -26701807.21 0.0083 0.0056

Mercury -77819-09-05 05:44 J -26701719.33 -26701719.26 -26701719.18 0.0083 0.0066

Mercury -77819-12-02 06:56 J -26701631.25 -26701631.21 -26701631.16 0.0083 0.0077

Venus -77814-07-19 01:40 J -26699941.55 -26699941.43 -26699941.28 0.0080 0.0062

Venus -77813-02-29 11:30 J -26699716.23 -26699716.02 -26699715.80 0.0080 0.0006

Venus -77813-10-11 20:52 J -26699490.79 -26699490.63 -26699490.45 0.0079 0.0050

Earth -77811-02-19 12:56 J -26698995.21 -26698994.96 -26698994.71 0.0079 0.0018

Moon -77811-02-19 15:49 J -26698995.09 -26698994.84 -26698994.59 0.0079 0.0018 \*

Mercury -77668-10-15 08:52 J -26646526.15 -26646526.13 -26646526.05 0.0060 0.0058

Mercury -77667-01-11 10:18 J -26646438.14 -26646438.07 -26646437.96 0.0060 0.0052

Mercury -77667-04-09 11:59 J -26646350.11 -26646350.00 -26646349.88 0.0060 0.0046

Mercury -77667-07-06 12:56 J -26646262.08 -26646261.96 -26646261.80 0.0060 0.0041

Mercury -77667-10-02 14:23 J -26646174.04 -26646173.90 -26646173.73 0.0060 0.0035

Mercury -77667-12-29 15:49 J -26646085.99 -26646085.84 -26646085.66 0.0060 0.0030

Mercury -77666-03-27 17:30 J -26645997.95 -26645997.77 -26645997.60 0.0060 0.0024

Mercury -77666-06-23 18:28 J -26645909.90 -26645909.73 -26645909.54 0.0060 0.0018

Mercury -77666-09-19 19:54 J -26645821.85 -26645821.67 -26645821.48 0.0060 0.0013

Mercury -77666-12-16 21:20 J -26645733.79 -26645733.61 -26645733.42 0.0061 0.0007

Mercury -77665-03-13 22:47 J -26645645.74 -26645645.55 -26645645.36 0.0061 0.0001

Mercury -77665-06-09 23:59 J -26645557.68 -26645557.50 -26645557.30 0.0061 0.0006

Mercury -77665-09-06 01:25 J -26645469.62 -26645469.44 -26645469.25 0.0061 0.0011

Mercury -77665-12-03 02:52 J -26645381.56 -26645381.38 -26645381.19 0.0061 0.0017

Mercury -77664-03-01 04:18 J -26645293.49 -26645293.32 -26645293.14 0.0061 0.0023

Mercury -77664-05-28 05:30 J -26645205.43 -26645205.27 -26645205.09 0.0061 0.0029

Mercury -77664-08-24 06:56 J -26645117.36 -26645117.21 -26645117.05 0.0061 0.0035

Mercury -77664-11-20 08:08 J -26645029.28 -26645029.16 -26645029.00 0.0061 0.0042

Mercury -77663-02-16 09:35 J -26644941.20 -26644941.10 -26644940.96 0.0061 0.0048

Mercury -77663-05-15 11:01 J -26644853.11 -26644853.04 -26644852.93 0.0061 0.0054

Mercury -77663-08-11 12:42 J -26644765.00 -26644764.97 -26644764.92 0.0061 0.0060

Venus -77654-03-07 23:30 J -26641634.59 -26641634.52 -26641634.39 0.0064 0.0057

Venus -77654-10-19 05:01 J -26641409.49 -26641409.29 -26641409.08 0.0064 0.0027

Venus -77653-05-31 10:04 J -26641184.30 -26641184.08 -26641183.85 0.0065 0.0004

Venus -77652-01-11 15:06 J -26640959.05 -26640958.87 -26640958.67 0.0065 0.0035

Earth -77651-08-16 02:08 J -26640377.65 -26640377.41 -26640377.15 0.0065 0.0021

Moon -77651-08-16 04:18 J -26640377.56 -26640377.32 -26640377.05 0.0065 0.0022 \*

Mercury -77574-08-13 21:20 J -26612255.66 -26612255.61 -26612255.54 0.0084 0.0075

Mercury -77574-11-09 23:01 J -26612167.63 -26612167.54 -26612167.45 0.0084 0.0063

Mercury -77573-02-06 00:13 J -26612079.59 -26612079.49 -26612079.38 0.0084 0.0052

Mercury -77573-05-04 01:40 J -26611991.54 -26611991.43 -26611991.31 0.0084 0.0041

Mercury -77573-07-31 03:06 J -26611903.49 -26611903.37 -26611903.24 0.0084 0.0029

Mercury -77573-10-27 04:32 J -26611815.44 -26611815.31 -26611815.18 0.0084 0.0018

Mercury -77572-01-23 05:44 J -26611727.39 -26611727.26 -26611727.12 0.0084 0.0008

Mercury -77572-04-21 07:11 J -26611639.33 -26611639.20 -26611639.06 0.0084 0.0004

Mercury -77572-07-18 08:23 J -26611551.28 -26611551.15 -26611551.01 0.0083 0.0016

Mercury -77572-10-14 09:49 J -26611463.22 -26611463.09 -26611462.96 0.0083 0.0026

Mercury -77571-01-10 11:01 J -26611375.15 -26611375.04 -26611374.91 0.0083 0.0037

Mercury -77571-04-08 12:13 J -26611287.09 -26611286.99 -26611286.87 0.0083 0.0048

Mercury -77571-07-05 13:40 J -26611199.02 -26611198.93 -26611198.83 0.0083 0.0058

Mercury -77571-10-01 14:52 J -26611110.94 -26611110.88 -26611110.80 0.0083 0.0069

Mercury -77571-12-28 16:04 J -26611022.85 -26611022.83 -26611022.78 0.0083 0.0080

Venus -77566-06-21 09:20 J -26609387.12 -26609387.11 -26609387.05 0.0080 0.0079

Venus -77565-02-01 19:25 J -26609161.89 -26609161.69 -26609161.48 0.0080 0.0023

Venus -77565-09-14 05:01 J -26608936.48 -26608936.29 -26608936.09 0.0079 0.0033

Moon -77563-02-21 00:13 J -26608411.71 -26608411.49 -26608411.24 0.0079 0.0025

Earth -77563-02-21 01:54 J -26608411.64 -26608411.42 -26608411.17 0.0079 0.0029 \*

Mars -77562-10-09 08:23 J -26607816.34 -26607816.15 -26607815.93 0.0078 0.0053

Mercury -77420-11-10 16:18 J -26555917.85 -26555917.82 -26555917.74 0.0060 0.0057

Mercury -77419-02-06 17:59 J -26555829.84 -26555829.75 -26555829.65 0.0060 0.0051

Mercury -77419-05-05 18:56 J -26555741.81 -26555741.71 -26555741.57 0.0060 0.0046

Mercury -77419-08-01 20:23 J -26555653.77 -26555653.65 -26555653.49 0.0060 0.0040

Mercury -77419-10-28 21:49 J -26555565.73 -26555565.59 -26555565.42 0.0060 0.0035

Mercury -77418-01-24 23:01 J -26555477.69 -26555477.54 -26555477.36 0.0060 0.0029

Mercury -77418-04-23 00:28 J -26555389.64 -26555389.48 -26555389.29 0.0060 0.0023

Mercury -77418-07-20 01:54 J -26555301.59 -26555301.42 -26555301.23 0.0060 0.0018

Mercury -77418-10-16 03:20 J -26555213.54 -26555213.36 -26555213.17 0.0060 0.0012

Mercury -77417-01-12 04:47 J -26555125.49 -26555125.30 -26555125.11 0.0061 0.0006

Mercury -77417-04-09 06:13 J -26555037.43 -26555037.24 -26555037.05 0.0061 0.0001

Mercury -77417-07-06 07:25 J -26554949.37 -26554949.19 -26554949.00 0.0061 0.0006

Mercury -77417-10-02 08:52 J -26554861.31 -26554861.13 -26554860.94 0.0061 0.0012

Mercury -77417-12-29 10:04 J -26554773.25 -26554773.08 -26554772.89 0.0061 0.0018

Mercury -77416-03-27 11:16 J -26554685.19 -26554685.03 -26554684.84 0.0061 0.0024

Mercury -77416-06-23 12:42 J -26554597.12 -26554596.97 -26554596.79 0.0061 0.0030

Mercury -77416-09-19 13:54 J -26554509.05 -26554508.92 -26554508.74 0.0061 0.0036

Mercury -77416-12-16 15:20 J -26554420.98 -26554420.86 -26554420.70 0.0061 0.0042

Mercury -77415-03-14 16:47 J -26554332.89 -26554332.80 -26554332.66 0.0061 0.0048

Mercury -77415-06-10 18:13 J -26554244.81 -26554244.74 -26554244.63 0.0061 0.0054

Mercury -77415-09-06 19:40 J -26554156.69 -26554156.68 -26554156.62 0.0061 0.0060

Venus -77406-09-21 11:30 J -26550855.16 -26550855.02 -26550854.81 0.0064 0.0042

Venus -77405-05-03 17:01 J -26550630.00 -26550629.79 -26550629.56 0.0064 0.0011

Venus -77405-12-14 22:04 J -26550404.78 -26550404.58 -26550404.35 0.0065 0.0021

Venus -77404-07-28 02:52 J -26550179.49 -26550179.38 -26550179.22 0.0065 0.0052

Moon -77403-08-17 13:54 J -26549794.16 -26549793.92 -26549793.66 0.0065 0.0013

Earth -77403-08-17 14:37 J -26549794.14 -26549793.89 -26549793.63 0.0065 0.0015 \*

Mercury -77326-09-09 05:59 J -26521647.30 -26521647.25 -26521647.18 0.0084 0.0075

Mercury -77326-12-06 07:25 J -26521559.27 -26521559.19 -26521559.09 0.0084 0.0063

Mercury -77325-03-03 09:06 J -26521471.23 -26521471.12 -26521471.01 0.0084 0.0051

Mercury -77325-05-30 10:18 J -26521383.18 -26521383.07 -26521382.94 0.0084 0.0040

Mercury -77325-08-26 11:44 J -26521295.13 -26521295.01 -26521294.88 0.0084 0.0029

Mercury -77325-11-22 13:11 J -26521207.08 -26521206.95 -26521206.82 0.0084 0.0018

Mercury -77324-02-18 14:37 J -26521119.03 -26521118.89 -26521118.76 0.0084 0.0007

Mercury -77324-05-17 15:49 J -26521030.97 -26521030.84 -26521030.70 0.0084 0.0005

Mercury -77324-08-13 17:16 J -26520942.91 -26520942.78 -26520942.65 0.0083 0.0016

Mercury -77324-11-09 18:28 J -26520854.85 -26520854.73 -26520854.60 0.0083 0.0027

Mercury -77323-02-05 19:54 J -26520766.79 -26520766.67 -26520766.55 0.0083 0.0037

Mercury -77323-05-04 21:06 J -26520678.73 -26520678.62 -26520678.51 0.0083 0.0048

Mercury -77323-07-31 22:18 J -26520590.66 -26520590.57 -26520590.47 0.0083 0.0059

Mercury -77323-10-27 23:44 J -26520502.58 -26520502.51 -26520502.44 0.0083 0.0069

Mercury -77322-01-24 00:42 J -26520414.49 -26520414.47 -26520414.42 0.0083 0.0080

Venus -77317-01-05 01:54 J -26518607.59 -26518607.42 -26518607.23 0.0080 0.0044

Venus -77317-08-17 11:30 J -26518382.23 -26518382.02 -26518381.80 0.0080 0.0012

Venus -77316-03-30 20:23 J -26518156.74 -26518156.65 -26518156.50 0.0079 0.0066

Earth -77315-02-22 12:56 J -26517828.18 -26517827.96 -26517827.71 0.0079 0.0031

Moon -77315-02-22 13:40 J -26517828.16 -26517827.93 -26517827.67 0.0079 0.0030 \*

Mars -77313-01-17 16:04 J -26517134.11 -26517133.83 -26517133.55 0.0078 0.0001

Mercury -77172-12-06 23:30 J -26465309.55 -26465309.52 -26465309.44 0.0060 0.0057

Mercury -77171-03-05 01:11 J -26465221.54 -26465221.45 -26465221.34 0.0060 0.0051

Mercury -77171-06-01 02:08 J -26465133.51 -26465133.41 -26465133.26 0.0060 0.0046

Mercury -77171-08-28 03:35 J -26465045.47 -26465045.35 -26465045.19 0.0060 0.0041

Mercury -77171-11-24 05:16 J -26464957.43 -26464957.28 -26464957.12 0.0060 0.0034

Mercury -77170-02-20 06:13 J -26464869.39 -26464869.24 -26464869.06 0.0060 0.0029

Mercury -77170-05-19 07:40 J -26464781.34 -26464781.18 -26464780.99 0.0060 0.0023

Mercury -77170-08-15 09:06 J -26464693.29 -26464693.12 -26464692.93 0.0060 0.0018

Mercury -77170-11-11 10:32 J -26464605.24 -26464605.06 -26464604.87 0.0060 0.0012

Mercury -77169-02-07 11:59 J -26464517.19 -26464517.00 -26464516.81 0.0060 0.0006

Mercury -77169-05-05 13:11 J -26464429.13 -26464428.95 -26464428.75 0.0061 0.0002

Mercury -77169-08-01 14:37 J -26464341.08 -26464340.89 -26464340.70 0.0061 0.0006

Mercury -77169-10-28 15:49 J -26464253.02 -26464252.84 -26464252.64 0.0061 0.0012

Mercury -77168-01-24 17:16 J -26464164.95 -26464164.78 -26464164.59 0.0061 0.0018

Mercury -77168-04-22 18:28 J -26464076.89 -26464076.73 -26464076.54 0.0061 0.0024

Mercury -77168-07-19 20:08 J -26463988.82 -26463988.66 -26463988.49 0.0061 0.0029

Mercury -77168-10-15 21:35 J -26463900.75 -26463900.60 -26463900.44 0.0061 0.0035

Mercury -77167-01-11 22:47 J -26463812.68 -26463812.55 -26463812.40 0.0061 0.0042

Mercury -77167-04-10 00:13 J -26463724.60 -26463724.49 -26463724.36 0.0061 0.0048

Mercury -77167-07-07 01:40 J -26463636.51 -26463636.43 -26463636.33 0.0061 0.0054

Mercury -77167-10-03 03:20 J -26463548.40 -26463548.36 -26463548.32 0.0061 0.0060

Venus -77158-08-24 18:13 J -26460300.82 -26460300.74 -26460300.61 0.0064 0.0056

Venus -77157-04-05 23:30 J -26460075.72 -26460075.52 -26460075.31 0.0064 0.0026

Venus -77157-11-17 04:32 J -26459850.53 -26459850.31 -26459850.08 0.0065 0.0005

Venus -77156-06-30 09:35 J -26459625.28 -26459625.10 -26459624.90 0.0065 0.0036

Earth -77155-08-19 01:54 J -26459210.68 -26459210.42 -26459210.16 0.0065 0.0013

Moon -77155-08-19 01:54 J -26459210.68 -26459210.42 -26459210.14 0.0065 0.0010 \*

Mercury -77078-10-05 14:23 J -26431038.95 -26431038.90 -26431038.85 0.0084 0.0077

Mercury -77077-01-01 15:35 J -26430950.92 -26430950.85 -26430950.76 0.0084 0.0066

Mercury -77077-03-29 17:01 J -26430862.89 -26430862.79 -26430862.68 0.0084 0.0054

Mercury -77077-06-25 18:13 J -26430774.84 -26430774.74 -26430774.61 0.0084 0.0043

Mercury -77077-09-21 19:54 J -26430686.79 -26430686.67 -26430686.54 0.0084 0.0031

Mercury -77077-12-18 21:20 J -26430598.74 -26430598.61 -26430598.48 0.0084 0.0020

Mercury -77076-03-16 22:47 J -26430510.69 -26430510.55 -26430510.42 0.0084 0.0009

Mercury -77076-06-12 23:59 J -26430422.63 -26430422.50 -26430422.36 0.0083 0.0003

Mercury -77076-09-09 01:25 J -26430334.57 -26430334.44 -26430334.31 0.0083 0.0013

Mercury -77076-12-06 02:37 J -26430246.51 -26430246.39 -26430246.25 0.0083 0.0024

Mercury -77075-03-04 03:49 J -26430158.45 -26430158.34 -26430158.21 0.0083 0.0035

Mercury -77075-05-31 05:01 J -26430070.39 -26430070.29 -26430070.16 0.0083 0.0046

Mercury -77075-08-27 06:42 J -26429982.32 -26429982.22 -26429982.12 0.0083 0.0056

Mercury -77075-11-23 07:40 J -26429894.24 -26429894.18 -26429894.09 0.0083 0.0067

Mercury -77074-02-19 09:20 J -26429806.16 -26429806.11 -26429806.07 0.0083 0.0077

Venus -77070-12-08 07:11 J -26428053.29 -26428053.20 -26428053.11 0.0080 0.0072

Venus -77069-07-20 16:32 J -26427828.01 -26427827.81 -26427827.59 0.0080 0.0017

Venus -77068-03-03 01:40 J -26427602.60 -26427602.43 -26427602.22 0.0079 0.0039

Earth -77067-02-23 21:49 J -26427244.82 -26427244.59 -26427244.33 0.0079 0.0022

Moon -77067-02-23 22:18 J -26427244.80 -26427244.57 -26427244.33 0.0079 0.0025 \*

Mars -77065-04-26 17:44 J -26426451.98 -26426451.76 -26426451.48 0.0077 0.0038

# 77TH MILLENNIUM BCE

# **This is a list of transits visible from Pluto in the 77th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-76923-01-02 06:28 J	-26374701.25	-26374701.23	-26374701.17	0.0060	0.0058		
Mercury	-76923-03-31 07:25 J	-26374613.25	-26374613.19	-26374613.07	0.0060	0.0053		
Mercury	-76923-06-27 09:06 J	-26374525.22	-26374525.12	-26374524.99	0.0060	0.0047		
Mercury	-76923-09-23 10:47 J	-26374437.19	-26374437.05	-26374436.92	0.0060	0.0042		
Mercury	-76923-12-20 11:30 J	-26374349.15	-26374349.02	-26374348.85	0.0060	0.0037		
Mercury	-76922-03-18 13:11 J	-26374261.11	-26374260.95	-26374260.78	0.0060	0.0030		
Mercury	-76922-06-14 14:37 J	-26374173.06	-26374172.89	-26374172.72	0.0060	0.0025		
Mercury	-76922-09-10 15:35 J	-26374085.01	-26374084.85	-26374084.66	0.0060	0.0020		
Mercury	-76922-12-07 17:01 J	-26373996.96	-26373996.79	-26373996.60	0.0060	0.0014		
Mercury	-76921-03-04 18:28 J	-26373908.91	-26373908.73	-26373908.54	0.0061	0.0008		
Mercury	-76921-05-31 19:54 J	-26373820.86	-26373820.67	-26373820.48	0.0061	0.0002		
Mercury	-76921-08-27 21:20 J	-26373732.80	-26373732.61	-26373732.42	0.0061	0.0004		
Mercury	-76921-11-23 22:32 J	-26373644.74	-26373644.56	-26373644.37	0.0061	0.0010		
Mercury	-76920-02-19 23:44 J	-26373556.68	-26373556.51	-26373556.31	0.0061	0.0016		
Mercury	-76920-05-19 01:11 J	-26373468.62	-26373468.45	-26373468.26	0.0061	0.0022		
Mercury	-76920-08-15 02:23 J	-26373380.55	-26373380.40	-26373380.21	0.0061	0.0028		
Mercury	-76920-11-11 03:49 J	-26373292.48	-26373292.34	-26373292.17	0.0061	0.0034		
Mercury	-76919-02-07 05:01 J	-26373204.41	-26373204.29	-26373204.12	0.0061	0.0040		
Mercury	-76919-05-06 06:28 J	-26373116.33	-26373116.23	-26373116.08	0.0061	0.0046		
Mercury	-76919-08-02 07:54 J	-26373028.25	-26373028.17	-26373028.05	0.0061	0.0052		
Mercury	-76919-10-29 09:20 J	-26372940.15	-26372940.11	-26372940.03	0.0061	0.0058		
Venus	-76909-03-09 04:47 J	-26369521.44	-26369521.30	-26369521.11	0.0064	0.0045		
Venus	-76909-10-20 10:04 J	-26369296.29	-26369296.08	-26369295.84	0.0065	0.0014		
Venus	-76908-06-02 15:20 J	-26369071.07	-26369070.86	-26369070.63	0.0065	0.0018		
Venus	-76907-01-13 20:08 J	-26368845.78	-26368845.66	-26368845.49	0.0065	0.0049		



Earth -76907-08-20 11:59 J -26368627.25 -26368627.00 -26368626.73 0.0065 0.0015  
 Moon -76907-08-20 13:25 J -26368627.18 -26368626.94 -26368626.68 0.0065 0.0016 \*  
 Mercury -76830-10-31 22:32 J -26340430.60 -26340430.56 -26340430.51 0.0084 0.0079  
 Mercury -76829-01-27 23:44 J -26340342.58 -26340342.51 -26340342.41 0.0084 0.0068  
 Mercury -76829-04-25 01:11 J -26340254.54 -26340254.45 -26340254.34 0.0084 0.0056  
 Mercury -76829-07-22 02:52 J -26340166.49 -26340166.38 -26340166.26 0.0084 0.0044  
 Mercury -76829-10-18 04:18 J -26340078.45 -26340078.32 -26340078.20 0.0084 0.0033  
 Mercury -76828-01-14 05:30 J -26339990.39 -26339990.27 -26339990.13 0.0084 0.0022  
 Mercury -76828-04-12 06:56 J -26339902.34 -26339902.21 -26339902.07 0.0084 0.0011  
 Mercury -76828-07-09 08:23 J -26339814.29 -26339814.15 -26339814.01 0.0084 0.0001  
 Mercury -76828-10-05 09:49 J -26339726.23 -26339726.09 -26339725.96 0.0083 0.0012  
 Mercury -76827-01-01 11:01 J -26339638.17 -26339638.04 -26339637.91 0.0083 0.0022  
 Mercury -76827-03-30 12:13 J -26339550.11 -26339549.99 -26339549.86 0.0083 0.0033  
 Mercury -76827-06-26 13:25 J -26339462.04 -26339461.94 -26339461.81 0.0083 0.0044  
 Mercury -76827-09-22 15:06 J -26339373.97 -26339373.87 -26339373.77 0.0083 0.0054  
 Mercury -76827-12-19 16:04 J -26339285.90 -26339285.83 -26339285.74 0.0083 0.0065  
 Mercury -76826-03-17 17:16 J -26339197.82 -26339197.78 -26339197.71 0.0083 0.0076  
 Venus -76821-06-22 21:49 J -26337273.76 -26337273.59 -26337273.40 0.0080 0.0043  
 Venus -76820-02-03 07:25 J -26337048.40 -26337048.19 -26337047.98 0.0079 0.0012  
 Venus -76820-09-16 16:32 J -26336822.92 -26336822.81 -26336822.69 0.0079 0.0066  
 Moon -76819-02-25 05:01 J -26336661.53 -26336661.29 -26336661.02 0.0079 0.0019  
 Earth -76819-02-25 06:56 J -26336661.44 -26336661.21 -26336660.95 0.0079 0.0017 \*  
 Mercury -76675-04-26 14:08 J -26284004.96 -26284004.91 -26284004.82 0.0060 0.0055  
 Mercury -76675-07-23 15:35 J -26283916.94 -26283916.85 -26283916.73 0.0060 0.0049  
 Mercury -76675-10-19 16:32 J -26283828.91 -26283828.81 -26283828.66 0.0060 0.0045  
 Mercury -76674-01-15 18:13 J -26283740.87 -26283740.74 -26283740.58 0.0060 0.0038  
 Mercury -76674-04-13 19:40 J -26283652.83 -26283652.68 -26283652.52 0.0060 0.0033  
 Mercury -76674-07-10 20:37 J -26283564.79 -26283564.64 -26283564.45 0.0060 0.0028  
 Mercury -76674-10-06 22:04 J -26283476.74 -26283476.58 -26283476.39 0.0060 0.0022  
 Mercury -76673-01-02 23:44 J -26283388.69 -26283388.51 -26283388.33 0.0060 0.0016

Mercury -76673-03-31 00:42 J -26283300.64 -26283300.47 -26283300.27 0.0060 0.0011

Mercury -76673-06-27 02:23 J -26283212.59 -26283212.40 -26283212.21 0.0061 0.0004

Mercury -76673-09-23 03:49 J -26283124.53 -26283124.34 -26283124.15 0.0061 0.0002

Mercury -76673-12-20 05:01 J -26283036.48 -26283036.29 -26283036.10 0.0061 0.0007

Mercury -76672-03-18 06:13 J -26282948.42 -26282948.24 -26282948.05 0.0061 0.0014

Mercury -76672-06-14 07:40 J -26282860.35 -26282860.18 -26282859.99 0.0061 0.0019

Mercury -76672-09-10 09:06 J -26282772.29 -26282772.12 -26282771.94 0.0061 0.0025

Mercury -76672-12-07 10:18 J -26282684.22 -26282684.07 -26282683.90 0.0061 0.0031

Mercury -76671-03-05 11:30 J -26282596.15 -26282596.02 -26282595.85 0.0061 0.0037

Mercury -76671-06-01 12:56 J -26282508.08 -26282507.96 -26282507.81 0.0061 0.0043

Mercury -76671-08-28 14:23 J -26282420.00 -26282419.90 -26282419.77 0.0061 0.0049

Mercury -76671-11-24 15:35 J -26282331.91 -26282331.85 -26282331.75 0.0061 0.0056

Mercury -76670-02-20 17:30 J -26282243.77 -26282243.77 -26282243.77 0.0061 0.0061

Venus -76661-09-22 15:06 J -26278742.06 -26278741.87 -26278741.67 0.0064 0.0034

Venus -76660-05-05 20:08 J -26278516.88 -26278516.66 -26278516.43 0.0065 0.0003

Venus -76660-12-17 01:11 J -26278291.65 -26278291.45 -26278291.24 0.0065 0.0028

Venus -76659-07-30 05:44 J -26278066.32 -26278066.26 -26278066.14 0.0065 0.0061

Moon -76659-08-21 17:59 J -26278043.99 -26278043.75 -26278043.49 0.0065 0.0024

Earth -76659-08-21 20:23 J -26278043.89 -26278043.65 -26278043.39 0.0065 0.0021 \*

Mercury -76581-02-23 07:11 J -26249734.25 -26249734.20 -26249734.12 0.0084 0.0074

Mercury -76581-05-21 08:52 J -26249646.22 -26249646.13 -26249646.03 0.0084 0.0061

Mercury -76581-08-17 10:18 J -26249558.18 -26249558.07 -26249557.96 0.0084 0.0050

Mercury -76581-11-13 11:30 J -26249470.13 -26249470.02 -26249469.89 0.0084 0.0039

Mercury -76580-02-09 12:56 J -26249382.08 -26249381.96 -26249381.82 0.0084 0.0028

Mercury -76580-05-08 14:23 J -26249294.03 -26249293.90 -26249293.76 0.0084 0.0017

Mercury -76580-08-04 15:49 J -26249205.97 -26249205.84 -26249205.70 0.0084 0.0006

Mercury -76580-10-31 17:16 J -26249117.92 -26249117.78 -26249117.64 0.0083 0.0006

Mercury -76579-01-27 18:28 J -26249029.86 -26249029.73 -26249029.59 0.0083 0.0017

Mercury -76579-04-25 19:54 J -26248941.80 -26248941.67 -26248941.54 0.0083 0.0028

Mercury -76579-07-22 21:06 J -26248853.73 -26248853.62 -26248853.49 0.0083 0.0038

Mercury -76579-10-18 22:18 J -26248765.67 -26248765.57 -26248765.45 0.0083 0.0049

Mercury -76578-01-14 23:30 J -26248677.60 -26248677.52 -26248677.41 0.0083 0.0060

Mercury -76578-04-13 00:56 J -26248589.52 -26248589.46 -26248589.38 0.0083 0.0070

Mercury -76578-07-10 02:08 J -26248501.42 -26248501.41 -26248501.37 0.0082 0.0081

Venus -76573-05-26 00:56 J -26246719.51 -26246719.46 -26246719.41 0.0080 0.0077

Venus -76572-01-06 10:32 J -26246494.26 -26246494.06 -26246493.85 0.0079 0.0022

Venus -76572-08-19 19:40 J -26246268.86 -26246268.68 -26246268.47 0.0079 0.0033

Earth -76571-02-26 12:42 J -26246078.22 -26246077.97 -26246077.71 0.0079 0.0004

Moon -76571-02-26 15:06 J -26246078.11 -26246077.87 -26246077.62 0.0079 0.0006 \*

Mercury -76427-05-22 20:23 J -26193396.68 -26193396.65 -26193396.60 0.0060 0.0058

Mercury -76427-08-18 21:20 J -26193308.67 -26193308.61 -26193308.50 0.0060 0.0053

Mercury -76427-11-14 22:47 J -26193220.65 -26193220.55 -26193220.42 0.0060 0.0048

Mercury -76426-02-10 23:59 J -26193132.61 -26193132.50 -26193132.35 0.0060 0.0042

Mercury -76426-05-10 01:25 J -26193044.58 -26193044.44 -26193044.28 0.0060 0.0036

Mercury -76426-08-06 02:52 J -26192956.53 -26192956.38 -26192956.21 0.0060 0.0031

Mercury -76426-11-02 04:04 J -26192868.49 -26192868.33 -26192868.15 0.0060 0.0025

Mercury -76425-01-29 05:30 J -26192780.44 -26192780.27 -26192780.08 0.0060 0.0019

Mercury -76425-04-26 06:56 J -26192692.39 -26192692.21 -26192692.02 0.0060 0.0014

Mercury -76425-07-23 08:23 J -26192604.34 -26192604.15 -26192603.97 0.0061 0.0008

Mercury -76425-10-19 09:35 J -26192516.29 -26192516.10 -26192515.91 0.0061 0.0002

Mercury -76424-01-15 11:01 J -26192428.23 -26192428.04 -26192427.85 0.0061 0.0004

Mercury -76424-04-13 12:13 J -26192340.17 -26192339.99 -26192339.80 0.0061 0.0010

Mercury -76424-07-10 13:40 J -26192252.11 -26192251.93 -26192251.75 0.0061 0.0015

Mercury -76424-10-06 14:52 J -26192164.05 -26192163.88 -26192163.69 0.0061 0.0021

Mercury -76423-01-02 16:18 J -26192075.98 -26192075.82 -26192075.65 0.0061 0.0027

Mercury -76423-03-31 17:30 J -26191987.92 -26191987.77 -26191987.60 0.0061 0.0033

Mercury -76423-06-27 18:42 J -26191899.84 -26191899.72 -26191899.55 0.0061 0.0040

Mercury -76423-09-23 20:08 J -26191811.77 -26191811.66 -26191811.51 0.0061 0.0045

Mercury -76423-12-20 21:35 J -26191723.69 -26191723.60 -26191723.48 0.0061 0.0051

Mercury -76422-03-18 22:47 J -26191635.59 -26191635.55 -26191635.46 0.0061 0.0058

Venus -76413-08-25 18:42 J -26188187.81 -26188187.72 -26188187.59 0.0064 0.0057  
 Venus -76412-04-07 23:59 J -26187962.70 -26187962.50 -26187962.29 0.0065 0.0026  
 Venus -76412-11-19 05:16 J -26187737.51 -26187737.28 -26187737.06 0.0065 0.0005  
 Venus -76411-07-02 09:49 J -26187512.25 -26187512.09 -26187511.88 0.0065 0.0037  
 Earth -76411-08-23 03:49 J -26187460.56 -26187460.34 -26187460.09 0.0065 0.0030  
 Moon -76411-08-23 06:42 J -26187460.43 -26187460.22 -26187459.97 0.0065 0.0031 \*  
 Moon -76410-08-24 13:54 J -26187093.97 -26187093.92 -26187093.83 0.0066 0.0063  
 Earth -76410-08-24 17:44 J -26187093.80 -26187093.76 -26187093.69 0.0066 0.0064  
 Mars -76408-09-12 22:47 J -26186343.61 -26186343.55 -26186343.40 0.0066 0.0064  
 Mercury -76333-03-20 14:52 J -26159125.91 -26159125.88 -26159125.82 0.0084 0.0079  
 Mercury -76333-06-16 16:18 J -26159037.89 -26159037.82 -26159037.72 0.0084 0.0067  
 Mercury -76333-09-12 17:59 J -26158949.85 -26158949.75 -26158949.64 0.0084 0.0055  
 Mercury -76333-12-09 19:25 J -26158861.80 -26158861.69 -26158861.57 0.0084 0.0044  
 Mercury -76332-03-07 20:37 J -26158773.76 -26158773.64 -26158773.51 0.0084 0.0033  
 Mercury -76332-06-03 22:04 J -26158685.70 -26158685.58 -26158685.44 0.0084 0.0022  
 Mercury -76332-08-30 23:30 J -26158597.65 -26158597.52 -26158597.38 0.0084 0.0011  
 Mercury -76332-11-27 00:56 J -26158509.60 -26158509.46 -26158509.32 0.0083 0.0001  
 Mercury -76331-02-23 02:23 J -26158421.54 -26158421.40 -26158421.27 0.0083 0.0012  
 Mercury -76331-05-22 03:35 J -26158333.48 -26158333.35 -26158333.22 0.0083 0.0022  
 Mercury -76331-08-18 04:47 J -26158245.42 -26158245.30 -26158245.17 0.0083 0.0033  
 Mercury -76331-11-14 05:59 J -26158157.35 -26158157.25 -26158157.12 0.0083 0.0044  
 Mercury -76330-02-10 07:40 J -26158069.28 -26158069.18 -26158069.08 0.0083 0.0054  
 Mercury -76330-05-09 08:37 J -26157981.21 -26157981.14 -26157981.05 0.0083 0.0065  
 Mercury -76330-08-05 09:49 J -26157893.13 -26157893.09 -26157893.02 0.0083 0.0076  
 Venus -76325-12-09 13:54 J -26155940.07 -26155939.92 -26155939.76 0.0080 0.0055  
 Venus -76324-07-22 23:30 J -26155714.74 -26155714.52 -26155714.31 0.0079 0.0000  
 Moon -76323-02-27 14:52 J -26155495.11 -26155494.88 -26155494.62 0.0079 0.0026  
 Earth -76323-02-27 18:28 J -26155494.96 -26155494.73 -26155494.47 0.0079 0.0022 \*  
 Venus -76323-03-05 08:23 J -26155489.29 -26155489.15 -26155488.98 0.0079 0.0054  
 Mercury -76179-09-14 03:06 J -26102700.41 -26102700.37 -26102700.31 0.0060 0.0057

Mercury -76179-12-11 04:04 J -26102612.40 -26102612.33 -26102612.21 0.0060 0.0052  
 Mercury -76178-03-09 05:44 J -26102524.37 -26102524.26 -26102524.13 0.0060 0.0046  
 Mercury -76178-06-05 06:42 J -26102436.34 -26102436.22 -26102436.06 0.0060 0.0041  
 Mercury -76178-09-01 08:23 J -26102348.30 -26102348.15 -26102347.99 0.0060 0.0035  
 Mercury -76178-11-28 09:20 J -26102260.25 -26102260.11 -26102259.93 0.0060 0.0030  
 Mercury -76177-02-24 10:47 J -26102172.21 -26102172.05 -26102171.86 0.0060 0.0025  
 Mercury -76177-05-22 12:13 J -26102084.16 -26102083.99 -26102083.80 0.0060 0.0019  
 Mercury -76177-08-18 13:25 J -26101996.11 -26101995.94 -26101995.74 0.0060 0.0014  
 Mercury -76177-11-14 14:52 J -26101908.06 -26101907.88 -26101907.68 0.0060 0.0008  
 Mercury -76176-02-10 16:32 J -26101820.00 -26101819.81 -26101819.63 0.0061 0.0002  
 Mercury -76176-05-09 17:44 J -26101731.95 -26101731.76 -26101731.57 0.0061 0.0004  
 Mercury -76176-08-05 19:11 J -26101643.89 -26101643.70 -26101643.52 0.0061 0.0010  
 Mercury -76176-11-01 20:23 J -26101555.83 -26101555.65 -26101555.46 0.0061 0.0016  
 Mercury -76175-01-28 21:35 J -26101467.77 -26101467.60 -26101467.41 0.0061 0.0022  
 Mercury -76175-04-26 22:47 J -26101379.70 -26101379.55 -26101379.36 0.0061 0.0028  
 Mercury -76175-07-23 23:59 J -26101291.63 -26101291.50 -26101291.32 0.0061 0.0034  
 Mercury -76175-10-20 01:54 J -26101203.56 -26101203.42 -26101203.27 0.0061 0.0040  
 Mercury -76174-01-16 03:20 J -26101115.48 -26101115.36 -26101115.23 0.0061 0.0046  
 Mercury -76174-04-14 04:32 J -26101027.40 -26101027.31 -26101027.20 0.0061 0.0052  
 Mercury -76174-07-11 05:59 J -26100939.30 -26100939.25 -26100939.18 0.0061 0.0058  
 Venus -76164-03-11 02:08 J -26097408.52 -26097408.41 -26097408.25 0.0064 0.0053  
 Venus -76164-10-22 07:25 J -26097183.39 -26097183.19 -26097182.96 0.0065 0.0022  
 Venus -76163-06-04 12:42 J -26096958.19 -26096957.97 -26096957.74 0.0065 0.0010  
 Moon -76163-08-24 05:30 J -26096877.46 -26096877.27 -26096877.07 0.0065 0.0043  
 Earth -76163-08-24 08:37 J -26096877.29 -26096877.14 -26096876.93 0.0065 0.0047 \*  
 Venus -76162-01-15 17:44 J -26096732.92 -26096732.76 -26096732.57 0.0065 0.0041  
 Earth -76162-08-25 22:47 J -26096510.72 -26096510.55 -26096510.36 0.0065 0.0047  
 Moon -76162-08-26 01:40 J -26096510.61 -26096510.43 -26096510.21 0.0065 0.0044 \*  
 Mars -76160-12-20 17:59 J -26095662.90 -26095662.75 -26095662.53 0.0066 0.0057  
 Mercury -76085-07-12 22:47 J -26068429.58 -26068429.55 -26068429.48 0.0084 0.0079

Mercury	-76085-10-09 00:28 J	-26068341.56	-26068341.48	-26068341.39	0.0084	0.0066
Mercury	-76084-01-05 01:54 J	-26068253.52	-26068253.42	-26068253.31	0.0084	0.0055
Mercury	-76084-04-03 03:06 J	-26068165.47	-26068165.37	-26068165.24	0.0084	0.0044
Mercury	-76084-06-30 04:32 J	-26068077.43	-26068077.31	-26068077.17	0.0084	0.0033
Mercury	-76084-09-26 05:59 J	-26067989.37	-26067989.25	-26067989.11	0.0084	0.0022
Mercury	-76084-12-23 07:25 J	-26067901.32	-26067901.19	-26067901.05	0.0084	0.0010
Mercury	-76083-03-21 08:52 J	-26067813.27	-26067813.13	-26067812.99	0.0083	0.0001
Mercury	-76083-06-17 10:18 J	-26067725.21	-26067725.07	-26067724.94	0.0083	0.0012
Mercury	-76083-09-13 11:30 J	-26067637.15	-26067637.02	-26067636.89	0.0083	0.0023
Mercury	-76083-12-10 12:42 J	-26067549.09	-26067548.97	-26067548.84	0.0083	0.0034
Mercury	-76082-03-08 14:08 J	-26067461.02	-26067460.91	-26067460.79	0.0083	0.0044
Mercury	-76082-06-04 15:20 J	-26067372.95	-26067372.86	-26067372.75	0.0083	0.0055
Mercury	-76082-08-31 16:47 J	-26067284.88	-26067284.80	-26067284.72	0.0083	0.0065
Mercury	-76082-11-27 17:44 J	-26067196.80	-26067196.76	-26067196.69	0.0083	0.0076
Venus	-76076-06-24 23:16 J	-26065160.70	-26065160.53	-26065160.34	0.0079	0.0044
Venus	-76075-02-05 08:52 J	-26064935.34	-26064935.13	-26064934.92	0.0079	0.0011
Earth	-76075-02-28 18:28 J	-26064911.86	-26064911.73	-26064911.53	0.0079	0.0060
Moon	-76075-02-28 22:04 J	-26064911.73	-26064911.58	-26064911.38	0.0079	0.0059 *
Venus	-76075-09-18 17:30 J	-26064709.87	-26064709.77	-26064709.62	0.0079	0.0065

# 76TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 76th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury -75930-01-06 09:06 J -26012004.14 -26012004.12 -26012004.04 0.0060 0.0058  
 Mercury -75930-04-04 10:47 J -26011916.13 -26011916.05 -26011915.95 0.0060 0.0052  
 Mercury -75930-07-01 11:44 J -26011828.10 -26011828.01 -26011827.87 0.0060 0.0048  
 Mercury -75930-09-27 13:25 J -26011740.07 -26011739.94 -26011739.79 0.0060 0.0041  
 Mercury -75930-12-24 14:23 J -26011652.03 -26011651.90 -26011651.73 0.0060 0.0037  
 Mercury -75929-03-21 16:04 J -26011563.98 -26011563.83 -26011563.66 0.0060 0.0030  
 Mercury -75929-06-17 17:30 J -26011475.94 -26011475.77 -26011475.60 0.0060 0.0025  
 Mercury -75929-09-13 18:28 J -26011387.89 -26011387.73 -26011387.53 0.0060 0.0020  
 Mercury -75929-12-10 20:08 J -26011299.84 -26011299.66 -26011299.47 0.0060 0.0013  
 Mercury -75928-03-08 21:35 J -26011211.79 -26011211.60 -26011211.42 0.0061 0.0008  
 Mercury -75928-06-04 22:47 J -26011123.74 -26011123.55 -26011123.36 0.0061 0.0002  
 Mercury -75928-09-01 00:13 J -26011035.68 -26011035.49 -26011035.30 0.0061 0.0004  
 Mercury -75928-11-28 01:25 J -26010947.62 -26010947.44 -26010947.25 0.0061 0.0010  
 Mercury -75927-02-24 02:37 J -26010859.56 -26010859.39 -26010859.20 0.0061 0.0016  
 Mercury -75927-05-23 04:04 J -26010771.50 -26010771.33 -26010771.14 0.0061 0.0021  
 Mercury -75927-08-19 05:30 J -26010683.43 -26010683.27 -26010683.10 0.0061 0.0027  
 Mercury -75927-11-15 06:42 J -26010595.37 -26010595.22 -26010595.05 0.0061 0.0033  
 Mercury -75926-02-11 07:54 J -26010507.30 -26010507.17 -26010507.01 0.0061 0.0039  
 Mercury -75926-05-10 09:20 J -26010419.22 -26010419.11 -26010418.97 0.0061 0.0045  
 Mercury -75926-08-06 10:32 J -26010331.14 -26010331.06 -26010330.93 0.0061 0.0052  
 Mercury -75926-11-02 11:59 J -26010243.04 -26010243.00 -26010242.91 0.0061 0.0057  
 Venus -75916-09-24 09:06 J -26006629.24 -26006629.12 -26006628.96 0.0065 0.0050  
 Venus -75915-05-07 14:23 J -26006404.11 -26006403.90 -26006403.67 0.0065 0.0019  
 Moon -75915-08-25 16:18 J -26006293.82 -26006293.82 -26006293.77 0.0065 0.0065  
 Venus -75915-12-18 19:25 J -26006178.90 -26006178.69 -26006178.45 0.0065 0.0014  
 Venus -75914-08-01 00:42 J -26005953.62 -26005953.47 -26005953.29 0.0065 0.0045  
 Moon -75914-08-27 00:13 J -26005927.71 -26005927.49 -26005927.24 0.0065 0.0026  
 Earth -75914-08-27 02:37 J -26005927.61 -26005927.39 -26005927.13 0.0065 0.0028 \*  
 Mars -75911-03-29 10:47 J -26004982.21 -26004982.05 -26004981.80 0.0066 0.0055

Mercury -75837-11-04 07:11 J -25977733.25 -25977733.20 -25977733.14 0.0084 0.0077

Mercury -75836-01-31 08:37 J -25977645.22 -25977645.14 -25977645.05 0.0084 0.0065

Mercury -75836-04-29 09:49 J -25977557.18 -25977557.09 -25977556.97 0.0084 0.0054

Mercury -75836-07-26 11:16 J -25977469.14 -25977469.03 -25977468.90 0.0084 0.0043

Mercury -75836-10-22 12:56 J -25977381.09 -25977380.96 -25977380.83 0.0084 0.0031

Mercury -75835-01-18 14:08 J -25977293.04 -25977292.91 -25977292.77 0.0084 0.0021

Mercury -75835-04-16 15:35 J -25977204.98 -25977204.85 -25977204.71 0.0084 0.0009

Mercury -75835-07-13 17:01 J -25977116.93 -25977116.79 -25977116.65 0.0083 0.0002

Mercury -75835-10-09 18:13 J -25977028.87 -25977028.74 -25977028.60 0.0083 0.0013

Mercury -75834-01-05 19:40 J -25976940.81 -25976940.68 -25976940.55 0.0083 0.0023

Mercury -75834-04-03 20:52 J -25976852.75 -25976852.63 -25976852.50 0.0083 0.0034

Mercury -75834-06-30 22:04 J -25976764.68 -25976764.58 -25976764.45 0.0083 0.0045

Mercury -75834-09-26 23:44 J -25976676.61 -25976676.51 -25976676.41 0.0083 0.0055

Mercury -75834-12-24 00:42 J -25976588.54 -25976588.47 -25976588.38 0.0083 0.0066

Mercury -75833-03-21 02:23 J -25976500.45 -25976500.40 -25976500.35 0.0083 0.0076

Venus -75827-01-08 09:20 J -25974381.29 -25974381.11 -25974380.90 0.0079 0.0031

Venus -75827-08-21 18:56 J -25974155.91 -25974155.71 -25974155.50 0.0079 0.0023

Earth -75826-03-03 22:18 J -25973961.68 -25973961.57 -25973961.43 0.0079 0.0068

Moon -75826-03-04 00:13 J -25973961.61 -25973961.49 -25973961.31 0.0079 0.0064 \*

Venus -75826-04-04 03:35 J -25973930.37 -25973930.35 -25973930.28 0.0079 0.0077

Mercury -75682-04-30 15:20 J -25921307.87 -25921307.86 -25921307.82 0.0060 0.0059

Mercury -75682-07-27 16:18 J -25921219.87 -25921219.82 -25921219.71 0.0060 0.0054

Mercury -75682-10-23 17:59 J -25921131.85 -25921131.75 -25921131.63 0.0060 0.0048

Mercury -75681-01-19 18:56 J -25921043.82 -25921043.71 -25921043.56 0.0060 0.0043

Mercury -75681-04-16 20:37 J -25920955.78 -25920955.64 -25920955.49 0.0060 0.0037

Mercury -75681-07-13 21:35 J -25920867.74 -25920867.60 -25920867.42 0.0060 0.0033

Mercury -75681-10-09 23:01 J -25920779.69 -25920779.54 -25920779.36 0.0060 0.0027

Mercury -75680-01-06 00:42 J -25920691.65 -25920691.47 -25920691.29 0.0060 0.0021

Mercury -75680-04-04 01:40 J -25920603.60 -25920603.43 -25920603.23 0.0060 0.0016

Mercury -75680-07-01 03:20 J -25920515.55 -25920515.36 -25920515.17 0.0060 0.0010



Mercury -75680-09-27 04:32 J -25920427.49 -25920427.31 -25920427.12 0.0061 0.0004

Mercury -75680-12-24 05:59 J -25920339.44 -25920339.25 -25920339.06 0.0061 0.0002

Mercury -75679-03-22 07:11 J -25920251.38 -25920251.20 -25920251.01 0.0061 0.0008

Mercury -75679-06-18 08:23 J -25920163.32 -25920163.15 -25920162.95 0.0061 0.0014

Mercury -75679-09-14 10:04 J -25920075.26 -25920075.08 -25920074.90 0.0061 0.0019

Mercury -75679-12-11 11:16 J -25919987.20 -25919987.03 -25919986.85 0.0061 0.0025

Mercury -75678-03-09 12:28 J -25919899.13 -25919898.98 -25919898.80 0.0061 0.0031

Mercury -75678-06-05 13:40 J -25919811.06 -25919810.93 -25919810.76 0.0061 0.0037

Mercury -75678-09-01 15:06 J -25919722.99 -25919722.87 -25919722.72 0.0061 0.0043

Mercury -75678-11-28 16:18 J -25919634.91 -25919634.82 -25919634.68 0.0061 0.0049

Mercury -75677-02-24 17:44 J -25919546.82 -25919546.76 -25919546.65 0.0061 0.0055

Mercury -75677-05-22 19:11 J -25919458.70 -25919458.70 -25919458.66 0.0061 0.0061

Venus -75667-04-09 14:23 J -25915850.01 -25915849.90 -25915849.73 0.0065 0.0051

Venus -75667-11-20 19:40 J -25915624.88 -25915624.68 -25915624.45 0.0065 0.0020

Venus -75666-07-04 01:11 J -25915399.67 -25915399.45 -25915399.22 0.0065 0.0012

Earth -75666-08-28 04:47 J -25915344.56 -25915344.30 -25915344.04 0.0065 0.0000

Moon -75666-08-28 05:44 J -25915344.53 -25915344.26 -25915343.99 0.0065 0.0003 \*

Venus -75665-02-14 06:13 J -25915174.39 -25915174.24 -25915174.06 0.0065 0.0044

Mars -75663-07-05 21:20 J -25914301.67 -25914301.61 -25914301.52 0.0066 0.0065

Mercury -75588-02-26 14:08 J -25887036.94 -25887036.91 -25887036.87 0.0084 0.0082

Mercury -75588-05-25 15:20 J -25886948.92 -25886948.86 -25886948.77 0.0084 0.0071

Mercury -75588-08-21 16:47 J -25886860.88 -25886860.80 -25886860.69 0.0084 0.0059

Mercury -75588-11-17 18:28 J -25886772.84 -25886772.73 -25886772.62 0.0084 0.0047

Mercury -75587-02-13 19:54 J -25886684.79 -25886684.67 -25886684.55 0.0084 0.0036

Mercury -75587-05-12 21:20 J -25886596.74 -25886596.61 -25886596.48 0.0084 0.0025

Mercury -75587-08-08 22:32 J -25886508.69 -25886508.56 -25886508.42 0.0084 0.0014

Mercury -75587-11-04 23:59 J -25886420.63 -25886420.50 -25886420.36 0.0083 0.0003

Mercury -75586-02-01 01:25 J -25886332.58 -25886332.44 -25886332.31 0.0083 0.0008

Mercury -75586-04-30 02:37 J -25886244.52 -25886244.39 -25886244.25 0.0083 0.0019

Mercury -75586-07-27 04:04 J -25886156.46 -25886156.33 -25886156.20 0.0083 0.0029

Mercury -75586-10-23 05:16 J -25886068.39 -25886068.28 -25886068.16 0.0083 0.0040

Mercury -75585-01-19 06:28 J -25885980.33 -25885980.23 -25885980.11 0.0083 0.0051

Mercury -75585-04-16 07:54 J -25885892.26 -25885892.17 -25885892.08 0.0083 0.0061

Mercury -75585-07-13 09:06 J -25885804.18 -25885804.12 -25885804.05 0.0083 0.0071

Mercury -75585-10-09 10:18 J -25885716.07 -25885716.07 -25885716.04 0.0082 0.0082

Venus -75579-07-24 16:04 J -25883602.02 -25883601.83 -25883601.63 0.0079 0.0030

Moon -75578-03-04 17:59 J -25883378.99 -25883378.75 -25883378.50 0.0079 0.0014

Earth -75578-03-04 18:13 J -25883378.98 -25883378.74 -25883378.48 0.0079 0.0013 \*

Venus -75578-03-07 01:11 J -25883376.64 -25883376.45 -25883376.23 0.0079 0.0025

Venus -75578-10-18 10:04 J -25883151.09 -25883151.08 -25883151.03 0.0079 0.0078

Mercury -75434-11-18 22:18 J -25830523.62 -25830523.57 -25830523.49 0.0060 0.0056

Mercury -75433-02-14 23:16 J -25830435.60 -25830435.53 -25830435.40 0.0060 0.0051

Mercury -75433-05-13 00:56 J -25830347.57 -25830347.46 -25830347.32 0.0060 0.0045

Mercury -75433-08-09 02:08 J -25830259.53 -25830259.41 -25830259.25 0.0060 0.0040

Mercury -75433-11-05 03:35 J -25830171.49 -25830171.35 -25830171.18 0.0060 0.0034

Mercury -75432-02-01 05:01 J -25830083.45 -25830083.29 -25830083.12 0.0060 0.0029

Mercury -75432-04-30 06:13 J -25829995.40 -25829995.24 -25829995.06 0.0060 0.0023

Mercury -75432-07-27 07:40 J -25829907.35 -25829907.18 -25829906.99 0.0060 0.0018

Mercury -75432-10-23 09:06 J -25829819.30 -25829819.12 -25829818.94 0.0060 0.0012

Mercury -75431-01-19 10:18 J -25829731.25 -25829731.07 -25829730.88 0.0061 0.0006

Mercury -75431-04-17 11:44 J -25829643.20 -25829643.01 -25829642.82 0.0061 0.0001

Mercury -75431-07-14 12:56 J -25829555.14 -25829554.96 -25829554.77 0.0061 0.0005

Mercury -75431-10-10 14:23 J -25829467.08 -25829466.90 -25829466.71 0.0061 0.0011

Mercury -75430-01-06 15:35 J -25829379.02 -25829378.85 -25829378.66 0.0061 0.0017

Mercury -75430-04-04 16:47 J -25829290.96 -25829290.80 -25829290.61 0.0061 0.0023

Mercury -75430-07-01 18:28 J -25829202.89 -25829202.73 -25829202.56 0.0061 0.0028

Mercury -75430-09-27 19:40 J -25829114.83 -25829114.68 -25829114.51 0.0061 0.0034

Mercury -75430-12-24 20:52 J -25829026.75 -25829026.63 -25829026.47 0.0061 0.0040

Mercury -75429-03-21 22:18 J -25828938.68 -25828938.57 -25828938.43 0.0061 0.0046

Mercury -75429-06-17 23:30 J -25828850.60 -25828850.52 -25828850.40 0.0061 0.0053

Mercury -75429-09-14 00:56 J -25828762.50 -25828762.46 -25828762.38 0.0061 0.0058

Venus -75419-10-23 19:40 J -25825070.79 -25825070.68 -25825070.52 0.0065 0.0052

Venus -75418-06-06 01:11 J -25824845.66 -25824845.45 -25824845.23 0.0065 0.0021

Earth -75418-08-29 05:44 J -25824761.47 -25824761.26 -25824760.99 0.0065 0.0027

Moon -75418-08-29 06:28 J -25824761.46 -25824761.23 -25824760.99 0.0065 0.0025 \*

Venus -75417-01-17 06:13 J -25824620.45 -25824620.24 -25824620.00 0.0065 0.0012

Venus -75417-08-29 11:44 J -25824395.18 -25824395.01 -25824394.84 0.0065 0.0043

Mercury -75340-09-16 22:47 J -25796252.61 -25796252.55 -25796252.47 0.0084 0.0073

Mercury -75340-12-14 00:28 J -25796164.57 -25796164.48 -25796164.39 0.0084 0.0062

Mercury -75339-03-12 01:54 J -25796076.53 -25796076.42 -25796076.31 0.0084 0.0050

Mercury -75339-06-08 03:06 J -25795988.48 -25795988.37 -25795988.24 0.0084 0.0039

Mercury -75339-09-04 04:32 J -25795900.44 -25795900.31 -25795900.18 0.0084 0.0028

Mercury -75339-12-01 05:59 J -25795812.38 -25795812.25 -25795812.11 0.0084 0.0017

Mercury -75338-02-27 07:25 J -25795724.33 -25795724.19 -25795724.05 0.0084 0.0006

Mercury -75338-05-26 08:37 J -25795636.27 -25795636.14 -25795636.00 0.0083 0.0006

Mercury -75338-08-22 10:04 J -25795548.21 -25795548.08 -25795547.94 0.0083 0.0016

Mercury -75338-11-18 11:30 J -25795460.15 -25795460.02 -25795459.89 0.0083 0.0027

Mercury -75337-02-14 12:42 J -25795372.09 -25795371.97 -25795371.85 0.0083 0.0037

Mercury -75337-05-12 13:54 J -25795284.02 -25795283.92 -25795283.80 0.0083 0.0048

Mercury -75337-08-08 15:20 J -25795195.95 -25795195.86 -25795195.76 0.0083 0.0058

Mercury -75337-11-04 16:32 J -25795107.88 -25795107.81 -25795107.73 0.0083 0.0069

Mercury -75336-01-31 17:44 J -25795019.79 -25795019.76 -25795019.71 0.0082 0.0079

Venus -75331-06-26 14:23 J -25793047.90 -25793047.90 -25793047.89 0.0079 0.0079

Venus -75330-02-06 23:30 J -25792822.71 -25792822.52 -25792822.30 0.0079 0.0026

Moon -75330-03-05 15:06 J -25792796.09 -25792795.87 -25792795.61 0.0079 0.0032

Earth -75330-03-05 15:49 J -25792796.05 -25792795.84 -25792795.59 0.0079 0.0036 \*

Venus -75330-09-20 09:06 J -25792597.32 -25792597.12 -25792596.92 0.0079 0.0029

Mercury -75185-03-12 03:35 J -25739827.36 -25739827.35 -25739827.31 0.0060 0.0059

Mercury -75185-06-08 04:47 J -25739739.36 -25739739.30 -25739739.20 0.0060 0.0054

Mercury -75185-09-04 06:13 J -25739651.34 -25739651.24 -25739651.12 0.0060 0.0048

Mercury -75185-12-01 07:25 J -25739563.30 -25739563.19 -25739563.04 0.0060 0.0043

Mercury -75184-02-27 08:52 J -25739475.27 -25739475.13 -25739474.98 0.0060 0.0038

Mercury -75184-05-26 10:04 J -25739387.23 -25739387.08 -25739386.91 0.0060 0.0032

Mercury -75184-08-22 11:30 J -25739299.18 -25739299.02 -25739298.85 0.0060 0.0027

Mercury -75184-11-18 12:42 J -25739211.14 -25739210.97 -25739210.78 0.0060 0.0021

Mercury -75183-02-14 14:08 J -25739123.09 -25739122.91 -25739122.72 0.0060 0.0015

Mercury -75183-05-13 15:35 J -25739035.04 -25739034.85 -25739034.66 0.0060 0.0010

Mercury -75183-08-09 16:47 J -25738946.98 -25738946.80 -25738946.61 0.0061 0.0005

Mercury -75183-11-05 18:13 J -25738858.93 -25738858.74 -25738858.55 0.0061 0.0002

Mercury -75182-02-01 19:25 J -25738770.87 -25738770.69 -25738770.50 0.0061 0.0007

Mercury -75182-04-30 20:52 J -25738682.81 -25738682.63 -25738682.44 0.0061 0.0013

Mercury -75182-07-27 22:04 J -25738594.75 -25738594.58 -25738594.39 0.0061 0.0019

Mercury -75182-10-23 23:16 J -25738506.69 -25738506.53 -25738506.34 0.0061 0.0025

Mercury -75181-01-20 00:56 J -25738418.62 -25738418.46 -25738418.29 0.0061 0.0030

Mercury -75181-04-17 02:08 J -25738330.55 -25738330.41 -25738330.25 0.0061 0.0036

Mercury -75181-07-14 03:20 J -25738242.48 -25738242.36 -25738242.21 0.0061 0.0042

Mercury -75181-10-10 04:47 J -25738154.40 -25738154.30 -25738154.17 0.0061 0.0048

Mercury -75180-01-06 05:59 J -25738066.31 -25738066.25 -25738066.14 0.0061 0.0055

Mercury -75180-04-04 07:25 J -25737978.20 -25737978.19 -25737978.13 0.0061 0.0060

Venus -75170-05-08 23:30 J -25734291.60 -25734291.52 -25734291.38 0.0065 0.0057

Moon -75170-08-30 04:18 J -25734178.39 -25734178.32 -25734178.25 0.0065 0.0062

Earth -75170-08-30 05:16 J -25734178.34 -25734178.28 -25734178.14 0.0065 0.0060 \*

Venus -75170-12-20 05:16 J -25734066.48 -25734066.28 -25734066.07 0.0065 0.0025

Venus -75169-08-01 10:32 J -25733841.28 -25733841.06 -25733840.83 0.0065 0.0006

Earth -75169-08-30 18:56 J -25733811.91 -25733811.71 -25733811.46 0.0065 0.0034

Moon -75169-08-30 22:32 J -25733811.76 -25733811.56 -25733811.33 0.0065 0.0036 \*

Venus -75168-03-14 15:20 J -25733616.02 -25733615.86 -25733615.66 0.0065 0.0038

Mercury -75091-01-09 05:16 J -25705556.31 -25705556.28 -25705556.25 0.0084 0.0082

Mercury -75091-04-07 06:28 J -25705468.29 -25705468.23 -25705468.14 0.0084 0.0071

Mercury -75091-07-04 07:54 J -25705380.25 -25705380.17 -25705380.06 0.0084 0.0059

Mercury -75091-09-30 09:35 J -25705292.21 -25705292.10 -25705291.99 0.0084 0.0047

Mercury -75091-12-27 11:01 J -25705204.16 -25705204.04 -25705203.92 0.0084 0.0036

Mercury -75090-03-25 12:28 J -25705116.11 -25705115.98 -25705115.85 0.0084 0.0025

Mercury -75090-06-21 13:40 J -25705028.06 -25705027.93 -25705027.79 0.0084 0.0014

Mercury -75090-09-17 15:06 J -25704940.00 -25704939.87 -25704939.73 0.0083 0.0003

Mercury -75090-12-14 16:32 J -25704851.95 -25704851.81 -25704851.68 0.0083 0.0008

Mercury -75089-03-11 17:44 J -25704763.89 -25704763.76 -25704763.62 0.0083 0.0019

Mercury -75089-06-07 19:11 J -25704675.83 -25704675.70 -25704675.57 0.0083 0.0029

Mercury -75089-09-03 20:23 J -25704587.76 -25704587.65 -25704587.53 0.0083 0.0040

Mercury -75089-11-30 21:49 J -25704499.70 -25704499.59 -25704499.48 0.0083 0.0050

Mercury -75088-02-26 23:01 J -25704411.63 -25704411.54 -25704411.44 0.0083 0.0061

Mercury -75088-05-26 00:28 J -25704323.55 -25704323.48 -25704323.41 0.0083 0.0071

Mercury -75088-08-22 01:25 J -25704235.45 -25704235.44 -25704235.41 0.0082 0.0081

Venus -75082-08-23 04:32 J -25702043.51 -25702043.31 -25702043.11 0.0079 0.0030

Moon -75081-03-07 06:42 J -25701846.36 -25701846.22 -25701846.03 0.0079 0.0061

Earth -75081-03-07 10:18 J -25701846.22 -25701846.07 -25701845.89 0.0079 0.0060 \*

Venus -75081-04-04 13:40 J -25701818.13 -25701817.93 -25701817.72 0.0079 0.0024

Venus -75081-11-15 22:47 J -25701592.58 -25701592.55 -25701592.51 0.0078 0.0077

Mars -75079-07-03 10:04 J -25700998.14 -25700998.08 -25700997.94 0.0077 0.0073

# 75TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 75th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury -74937-09-30 10:04 J -25649043.11 -25649043.08 -25649043.00 0.0060 0.0057  
 Mercury -74937-12-27 11:59 J -25648955.09 -25648955.00 -25648954.91 0.0060 0.0051  
 Mercury -74936-03-25 12:56 J -25648867.06 -25648866.96 -25648866.83 0.0060 0.0046  
 Mercury -74936-06-21 14:37 J -25648779.03 -25648778.89 -25648778.76 0.0060 0.0041  
 Mercury -74936-09-17 15:35 J -25648690.99 -25648690.85 -25648690.69 0.0060 0.0035  
 Mercury -74936-12-14 17:01 J -25648602.95 -25648602.79 -25648602.62 0.0060 0.0030  
 Mercury -74935-03-12 18:13 J -25648514.90 -25648514.74 -25648514.56 0.0060 0.0024  
 Mercury -74935-06-08 19:40 J -25648426.86 -25648426.68 -25648426.50 0.0060 0.0019  
 Mercury -74935-09-04 20:52 J -25648338.81 -25648338.63 -25648338.44 0.0060 0.0013  
 Mercury -74935-12-01 22:18 J -25648250.75 -25648250.57 -25648250.38 0.0061 0.0008  
 Mercury -74934-02-27 23:44 J -25648162.70 -25648162.51 -25648162.32 0.0061 0.0002  
 Mercury -74934-05-27 00:56 J -25648074.65 -25648074.46 -25648074.27 0.0061 0.0004  
 Mercury -74934-08-23 02:08 J -25647986.59 -25647986.41 -25647986.22 0.0061 0.0010  
 Mercury -74934-11-19 03:20 J -25647898.53 -25647898.36 -25647898.16 0.0061 0.0016  
 Mercury -74933-02-15 04:47 J -25647810.47 -25647810.30 -25647810.11 0.0061 0.0021  
 Mercury -74933-05-13 06:13 J -25647722.40 -25647722.24 -25647722.06 0.0061 0.0027  
 Mercury -74933-08-09 07:25 J -25647634.33 -25647634.19 -25647634.02 0.0061 0.0033  
 Mercury -74933-11-05 09:06 J -25647546.26 -25647546.12 -25647545.97 0.0061 0.0039  
 Mercury -74932-02-01 10:18 J -25647458.19 -25647458.07 -25647457.93 0.0061 0.0045  
 Mercury -74932-04-30 11:30 J -25647370.11 -25647370.02 -25647369.90 0.0061 0.0051  
 Mercury -74932-07-27 12:56 J -25647282.02 -25647281.96 -25647281.87 0.0061 0.0057  
 Venus -74922-11-22 03:49 J -25643512.39 -25643512.34 -25643512.22 0.0065 0.0060  
 Venus -74921-07-04 09:49 J -25643287.29 -25643287.09 -25643286.88 0.0065 0.0028  
 Moon -74921-08-31 16:18 J -25643229.08 -25643228.82 -25643228.55 0.0065 0.0004  
 Earth -74921-08-31 19:54 J -25643228.93 -25643228.67 -25643228.41 0.0065 0.0002 \*  
 Venus -74920-02-14 15:06 J -25643062.10 -25643061.87 -25643061.64 0.0065 0.0003  
 Venus -74920-09-27 19:54 J -25642836.84 -25642836.67 -25642836.46 0.0065 0.0036  
 Mercury -74843-07-30 13:25 J -25614771.99 -25614771.94 -25614771.87 0.0084 0.0075  
 Mercury -74843-10-26 15:06 J -25614683.96 -25614683.87 -25614683.78 0.0084 0.0064

Mercury -74842-01-22 16:32 J -25614595.92 -25614595.81 -25614595.70 0.0084 0.0052

Mercury -74842-04-20 17:44 J -25614507.87 -25614507.76 -25614507.63 0.0084 0.0041

Mercury -74842-07-17 19:11 J -25614419.82 -25614419.70 -25614419.57 0.0084 0.0030

Mercury -74842-10-13 20:37 J -25614331.77 -25614331.64 -25614331.50 0.0084 0.0019

Mercury -74841-01-09 22:04 J -25614243.71 -25614243.58 -25614243.44 0.0084 0.0008

Mercury -74841-04-06 23:30 J -25614155.66 -25614155.52 -25614155.38 0.0083 0.0003

Mercury -74841-07-04 00:42 J -25614067.60 -25614067.47 -25614067.33 0.0083 0.0014

Mercury -74841-09-30 02:08 J -25613979.54 -25613979.41 -25613979.28 0.0083 0.0024

Mercury -74841-12-27 03:20 J -25613891.48 -25613891.36 -25613891.23 0.0083 0.0035

Mercury -74840-03-25 04:32 J -25613803.41 -25613803.31 -25613803.18 0.0083 0.0046

Mercury -74840-06-21 05:59 J -25613715.34 -25613715.25 -25613715.14 0.0083 0.0056

Mercury -74840-09-17 07:11 J -25613627.27 -25613627.20 -25613627.11 0.0083 0.0067

Mercury -74840-12-14 08:37 J -25613539.18 -25613539.14 -25613539.09 0.0082 0.0077

Venus -74833-03-07 11:01 J -25611264.24 -25611264.04 -25611263.84 0.0079 0.0028

Earth -74833-03-08 06:28 J -25611263.49 -25611263.23 -25611262.98 0.0079 0.0004

Moon -74833-03-08 09:49 J -25611263.34 -25611263.09 -25611262.83 0.0079 0.0008 \*

Venus -74833-10-18 20:08 J -25611038.86 -25611038.66 -25611038.45 0.0079 0.0025

Venus -74832-06-01 05:01 J -25610813.30 -25610813.29 -25610813.25 0.0078 0.0078

Mars -74831-10-10 20:37 J -25610316.83 -25610316.64 -25610316.41 0.0078 0.0052

Mercury -74688-04-20 16:47 J -25558258.86 -25558258.80 -25558258.72 0.0060 0.0055

Mercury -74688-07-17 17:44 J -25558170.84 -25558170.76 -25558170.64 0.0060 0.0050

Mercury -74688-10-13 18:56 J -25558082.81 -25558082.71 -25558082.56 0.0060 0.0045

Mercury -74687-01-09 20:37 J -25557994.77 -25557994.64 -25557994.49 0.0060 0.0039

Mercury -74687-04-07 21:35 J -25557906.73 -25557906.60 -25557906.42 0.0060 0.0034

Mercury -74687-07-04 23:01 J -25557818.69 -25557818.54 -25557818.36 0.0060 0.0029

Mercury -74687-10-01 00:42 J -25557730.64 -25557730.47 -25557730.30 0.0060 0.0023

Mercury -74687-12-28 01:40 J -25557642.60 -25557642.43 -25557642.24 0.0060 0.0018

Mercury -74686-03-26 03:20 J -25557554.55 -25557554.36 -25557554.18 0.0060 0.0012

Mercury -74686-06-22 04:32 J -25557466.49 -25557466.31 -25557466.12 0.0061 0.0006

Mercury -74686-09-18 05:59 J -25557378.44 -25557378.25 -25557378.06 0.0061 0.0001

Mercury -74686-12-15 07:11 J -25557290.38 -25557290.20 -25557290.01 0.0061 0.0005

Mercury -74685-03-12 08:37 J -25557202.33 -25557202.14 -25557201.96 0.0061 0.0011

Mercury -74685-06-08 09:49 J -25557114.27 -25557114.09 -25557113.90 0.0061 0.0017

Mercury -74685-09-04 11:01 J -25557026.20 -25557026.04 -25557025.85 0.0061 0.0023

Mercury -74685-12-01 12:28 J -25556938.14 -25556937.98 -25556937.80 0.0061 0.0028

Mercury -74684-02-27 13:40 J -25556850.07 -25556849.93 -25556849.76 0.0061 0.0034

Mercury -74684-05-26 14:52 J -25556762.00 -25556761.88 -25556761.72 0.0061 0.0040

Mercury -74684-08-22 16:18 J -25556673.92 -25556673.82 -25556673.68 0.0061 0.0046

Mercury -74684-11-18 18:13 J -25556585.84 -25556585.74 -25556585.64 0.0061 0.0052

Mercury -74683-02-14 19:25 J -25556497.75 -25556497.69 -25556497.62 0.0061 0.0058

Earth -74673-09-01 18:13 J -25552645.95 -25552645.74 -25552645.50 0.0065 0.0033

Moon -74673-09-01 21:35 J -25552645.79 -25552645.60 -25552645.35 0.0065 0.0036 \*

Venus -74672-01-17 13:11 J -25552508.14 -25552507.95 -25552507.75 0.0065 0.0034

Venus -74672-08-30 18:28 J -25552282.95 -25552282.73 -25552282.50 0.0065 0.0003

Moon -74672-09-03 05:44 J -25552279.29 -25552279.26 -25552279.17 0.0065 0.0063

Earth -74672-09-03 07:25 J -25552279.26 -25552279.19 -25552279.05 0.0065 0.0061 \*

Venus -74671-04-12 23:30 J -25552057.71 -25552057.52 -25552057.31 0.0065 0.0030

Venus -74671-11-24 04:47 J -25551832.36 -25551832.30 -25551832.21 0.0066 0.0062

Mercury -74595-11-21 19:54 J -25524075.67 -25524075.67 -25524075.67 0.0084 0.0084

Mercury -74594-02-17 20:52 J -25523987.68 -25523987.63 -25523987.55 0.0084 0.0074

Mercury -74594-05-16 22:18 J -25523899.65 -25523899.57 -25523899.46 0.0084 0.0062

Mercury -74594-08-12 23:59 J -25523811.60 -25523811.50 -25523811.39 0.0084 0.0050

Mercury -74594-11-09 01:25 J -25523723.56 -25523723.44 -25523723.31 0.0084 0.0039

Mercury -74593-02-05 02:52 J -25523635.51 -25523635.38 -25523635.25 0.0084 0.0028

Mercury -74593-05-03 04:04 J -25523547.45 -25523547.33 -25523547.19 0.0084 0.0018

Mercury -74593-07-30 05:44 J -25523459.40 -25523459.26 -25523459.13 0.0083 0.0006

Mercury -74593-10-26 06:56 J -25523371.34 -25523371.21 -25523371.07 0.0083 0.0005

Mercury -74592-01-22 08:23 J -25523283.28 -25523283.15 -25523283.01 0.0083 0.0015

Mercury -74592-04-20 09:35 J -25523195.22 -25523195.10 -25523194.96 0.0083 0.0026

Mercury -74592-07-17 10:47 J -25523107.16 -25523107.05 -25523106.92 0.0083 0.0037



Mercury -74592-10-13 12:13 J -25523019.09 -25523018.99 -25523018.87 0.0083 0.0047

Mercury -74591-01-09 13:25 J -25522931.02 -25522930.94 -25522930.83 0.0083 0.0058

Mercury -74591-04-07 14:52 J -25522842.95 -25522842.88 -25522842.80 0.0083 0.0068

Mercury -74591-07-04 16:18 J -25522754.86 -25522754.82 -25522754.78 0.0082 0.0078

Moon -74585-03-08 18:13 J -25520680.84 -25520680.74 -25520680.58 0.0079 0.0068

Earth -74585-03-08 21:20 J -25520680.72 -25520680.61 -25520680.46 0.0079 0.0067 \*

Venus -74585-09-20 14:52 J -25520485.07 -25520484.88 -25520484.68 0.0079 0.0035

Venus -74584-05-03 23:59 J -25520259.70 -25520259.50 -25520259.28 0.0079 0.0019

Venus -74584-12-15 09:35 J -25520034.19 -25520034.10 -25520034.02 0.0078 0.0071

Mars -74582-01-18 01:25 J -25519635.71 -25519635.44 -25519635.15 0.0078 0.0013

Mercury -74440-08-12 22:18 J -25467562.60 -25467562.57 -25467562.52 0.0060 0.0058

Mercury -74440-11-08 23:16 J -25467474.59 -25467474.53 -25467474.42 0.0060 0.0053

Mercury -74439-02-05 00:28 J -25467386.57 -25467386.48 -25467386.34 0.0060 0.0048

Mercury -74439-05-04 01:54 J -25467298.54 -25467298.42 -25467298.27 0.0060 0.0043

Mercury -74439-07-31 03:06 J -25467210.50 -25467210.37 -25467210.20 0.0060 0.0037

Mercury -74439-10-27 04:32 J -25467122.46 -25467122.31 -25467122.14 0.0060 0.0032

Mercury -74438-01-23 05:44 J -25467034.41 -25467034.26 -25467034.07 0.0060 0.0026

Mercury -74438-04-21 07:11 J -25466946.37 -25466946.20 -25466946.01 0.0060 0.0021

Mercury -74438-07-18 08:23 J -25466858.32 -25466858.15 -25466857.95 0.0060 0.0016

Mercury -74438-10-14 09:49 J -25466770.27 -25466770.09 -25466769.89 0.0060 0.0010

Mercury -74437-01-10 11:30 J -25466682.21 -25466682.02 -25466681.84 0.0061 0.0004

Mercury -74437-04-07 12:42 J -25466594.16 -25466593.97 -25466593.78 0.0061 0.0002

Mercury -74437-07-04 13:54 J -25466506.10 -25466505.92 -25466505.73 0.0061 0.0008

Mercury -74437-09-30 15:20 J -25466418.04 -25466417.86 -25466417.67 0.0061 0.0013

Mercury -74437-12-27 16:32 J -25466329.98 -25466329.81 -25466329.62 0.0061 0.0019

Mercury -74436-03-25 17:44 J -25466241.92 -25466241.76 -25466241.57 0.0061 0.0025

Mercury -74436-06-21 18:56 J -25466153.85 -25466153.71 -25466153.53 0.0061 0.0031

Mercury -74436-09-17 20:37 J -25466065.78 -25466065.64 -25466065.48 0.0061 0.0036

Mercury -74436-12-14 21:49 J -25465977.71 -25465977.59 -25465977.44 0.0061 0.0042

Mercury -74435-03-12 23:01 J -25465889.63 -25465889.54 -25465889.40 0.0061 0.0049

Mercury -74435-06-09 00:28 J -25465801.55 -25465801.48 -25465801.37 0.0061 0.0054

Mercury -74435-09-05 01:40 J -25465713.44 -25465713.43 -25465713.37 0.0061 0.0061

Moon -74425-09-02 17:01 J -25462062.79 -25462062.79 -25462062.78 0.0065 0.0065

Earth -74425-09-02 18:28 J -25462062.76 -25462062.73 -25462062.62 0.0065 0.0063

Venus -74424-08-02 17:30 J -25461728.94 -25461728.77 -25461728.57 0.0065 0.0037

Earth -74424-09-04 08:08 J -25461696.37 -25461696.16 -25461695.90 0.0065 0.0030

Moon -74424-09-04 09:06 J -25461696.33 -25461696.12 -25461695.85 0.0065 0.0032 \*

Venus -74423-03-15 23:01 J -25461503.76 -25461503.54 -25461503.31 0.0065 0.0006

Venus -74423-10-27 04:18 J -25461278.52 -25461278.32 -25461278.11 0.0066 0.0027

Venus -74422-06-09 09:06 J -25461053.18 -25461053.12 -25461052.99 0.0066 0.0060

Mercury -74346-06-12 03:49 J -25433291.37 -25433291.34 -25433291.27 0.0084 0.0078

Mercury -74346-09-08 05:30 J -25433203.35 -25433203.27 -25433203.18 0.0084 0.0066

Mercury -74346-12-05 06:56 J -25433115.31 -25433115.21 -25433115.10 0.0084 0.0055

Mercury -74345-03-02 08:23 J -25433027.26 -25433027.15 -25433027.03 0.0084 0.0044

Mercury -74345-05-29 09:49 J -25432939.21 -25432939.09 -25432938.96 0.0084 0.0033

Mercury -74345-08-25 11:16 J -25432851.16 -25432851.03 -25432850.90 0.0084 0.0022

Mercury -74345-11-21 12:28 J -25432763.11 -25432762.98 -25432762.84 0.0084 0.0012

Mercury -74344-02-17 13:54 J -25432675.05 -25432674.92 -25432674.78 0.0083 0.0003

Mercury -74344-05-16 15:20 J -25432586.99 -25432586.86 -25432586.72 0.0083 0.0011

Mercury -74344-08-12 16:47 J -25432498.93 -25432498.80 -25432498.67 0.0083 0.0021

Mercury -74344-11-08 17:59 J -25432410.87 -25432410.75 -25432410.62 0.0083 0.0032

Mercury -74343-02-04 19:25 J -25432322.81 -25432322.69 -25432322.57 0.0083 0.0042

Mercury -74343-05-03 20:37 J -25432234.74 -25432234.64 -25432234.53 0.0083 0.0053

Mercury -74343-07-30 22:04 J -25432146.67 -25432146.58 -25432146.49 0.0083 0.0063

Mercury -74343-10-26 23:01 J -25432058.59 -25432058.54 -25432058.47 0.0082 0.0074

Moon -74336-03-11 18:28 J -25429730.90 -25429730.73 -25429730.50 0.0079 0.0045

Earth -74336-03-11 19:11 J -25429730.90 -25429730.70 -25429730.46 0.0079 0.0041 \*

Venus -74336-04-05 21:20 J -25429705.80 -25429705.61 -25429705.41 0.0079 0.0034

Venus -74336-11-17 06:28 J -25429480.43 -25429480.23 -25429480.01 0.0079 0.0020

Venus -74335-06-30 15:49 J -25429254.92 -25429254.84 -25429254.76 0.0078 0.0072

Mars -74334-04-27 11:30 J -25428954.30 -25428954.02 -25428953.74 0.0078 0.0008  
 Mercury -74191-03-03 04:18 J -25376778.35 -25376778.32 -25376778.24 0.0060 0.0057  
 Mercury -74191-05-30 06:13 J -25376690.34 -25376690.24 -25376690.15 0.0060 0.0051  
 Mercury -74191-08-26 07:11 J -25376602.31 -25376602.20 -25376602.07 0.0060 0.0046  
 Mercury -74191-11-22 08:08 J -25376514.27 -25376514.16 -25376514.00 0.0060 0.0041  
 Mercury -74190-02-18 09:49 J -25376426.23 -25376426.09 -25376425.93 0.0060 0.0035  
 Mercury -74190-05-17 10:47 J -25376338.19 -25376338.05 -25376337.87 0.0060 0.0031  
 Mercury -74190-08-13 12:13 J -25376250.15 -25376249.99 -25376249.81 0.0060 0.0025  
 Mercury -74190-11-09 13:25 J -25376162.10 -25376161.94 -25376161.75 0.0060 0.0020  
 Mercury -74189-02-05 14:52 J -25376074.05 -25376073.88 -25376073.69 0.0060 0.0014  
 Mercury -74189-05-03 16:18 J -25375986.00 -25375985.82 -25375985.63 0.0061 0.0008  
 Mercury -74189-07-30 17:44 J -25375897.95 -25375897.76 -25375897.57 0.0061 0.0002  
 Mercury -74189-10-26 18:56 J -25375809.89 -25375809.71 -25375809.52 0.0061 0.0004  
 Mercury -74188-01-22 20:23 J -25375721.84 -25375721.65 -25375721.46 0.0061 0.0009  
 Mercury -74188-04-20 21:35 J -25375633.78 -25375633.60 -25375633.41 0.0061 0.0015  
 Mercury -74188-07-17 22:47 J -25375545.71 -25375545.55 -25375545.36 0.0061 0.0021  
 Mercury -74188-10-14 00:13 J -25375457.65 -25375457.49 -25375457.31 0.0061 0.0026  
 Mercury -74187-01-10 01:25 J -25375369.58 -25375369.44 -25375369.26 0.0061 0.0032  
 Mercury -74187-04-08 02:37 J -25375281.52 -25375281.39 -25375281.22 0.0061 0.0038  
 Mercury -74187-07-05 04:32 J -25375193.44 -25375193.31 -25375193.18 0.0061 0.0044  
 Mercury -74187-10-01 05:44 J -25375105.36 -25375105.26 -25375105.14 0.0061 0.0049  
 Mercury -74187-12-28 06:56 J -25375017.27 -25375017.21 -25375017.12 0.0061 0.0056  
 Mercury -74186-03-26 08:37 J -25374929.14 -25374929.14 -25374929.14 0.0061 0.0061  
 Earth -74176-09-05 07:25 J -25371113.45 -25371113.19 -25371112.92 0.0065 0.0005  
 Moon -74176-09-05 08:08 J -25371113.41 -25371113.16 -25371112.90 0.0065 0.0008 \*  
 Venus -74175-02-15 21:06 J -25370949.78 -25370949.62 -25370949.43 0.0065 0.0043  
 Venus -74175-09-29 02:37 J -25370724.61 -25370724.39 -25370724.16 0.0065 0.0011  
 Venus -74174-05-12 07:40 J -25370499.38 -25370499.18 -25370498.95 0.0066 0.0022  
 Venus -74174-12-23 13:11 J -25370274.06 -25370273.95 -25370273.81 0.0066 0.0054  
 Mercury -74098-12-31 11:30 J -25342507.06 -25342507.02 -25342506.94 0.0084 0.0076

Mercury -74097-03-28 12:56 J -25342419.03 -25342418.96 -25342418.86 0.0084 0.0064

Mercury -74097-06-24 14:52 J -25342330.99 -25342330.88 -25342330.78 0.0084 0.0052

Mercury -74097-09-20 15:49 J -25342242.94 -25342242.84 -25342242.71 0.0084 0.0042

Mercury -74097-12-17 17:30 J -25342154.89 -25342154.77 -25342154.64 0.0084 0.0030

Mercury -74096-03-15 18:56 J -25342066.84 -25342066.71 -25342066.57 0.0084 0.0019

Mercury -74096-06-11 20:23 J -25341978.79 -25341978.65 -25341978.51 0.0083 0.0008

Mercury -74096-09-07 21:49 J -25341890.73 -25341890.59 -25341890.46 0.0083 0.0003

Mercury -74096-12-04 23:01 J -25341802.67 -25341802.54 -25341802.40 0.0083 0.0013

Mercury -74095-03-03 00:13 J -25341714.61 -25341714.49 -25341714.35 0.0083 0.0024

Mercury -74095-05-30 01:40 J -25341626.55 -25341626.43 -25341626.30 0.0083 0.0034

Mercury -74095-08-26 02:52 J -25341538.48 -25341538.38 -25341538.26 0.0083 0.0045

Mercury -74095-11-22 04:18 J -25341450.41 -25341450.32 -25341450.21 0.0083 0.0055

Mercury -74094-02-18 05:30 J -25341362.34 -25341362.27 -25341362.18 0.0083 0.0066

Mercury -74094-05-17 06:42 J -25341274.26 -25341274.22 -25341274.15 0.0082 0.0076

Moon -74088-03-12 09:35 J -25339148.33 -25339148.10 -25339147.83 0.0079 0.0028

Earth -74088-03-12 11:44 J -25339148.24 -25339148.01 -25339147.77 0.0079 0.0028 \*

Venus -74088-10-20 01:25 J -25338926.60 -25338926.44 -25338926.23 0.0079 0.0040

Venus -74087-06-02 11:01 J -25338701.24 -25338701.04 -25338700.82 0.0079 0.0014

Venus -74086-01-13 20:08 J -25338475.76 -25338475.66 -25338475.54 0.0078 0.0066

Mars -74086-08-04 16:18 J -25338273.02 -25338272.82 -25338272.56 0.0078 0.0044

# 74TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 74th millennium BCE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Mercury -73943-06-25 10:18 J -25286082.08 -25286082.07 -25286082.03 0.0060 0.0059

Mercury -73943-09-21 11:16 J -25285994.09 -25285994.03 -25285993.93 0.0060 0.0054

Mercury -73943-12-18 12:28 J -25285906.06 -25285905.98 -25285905.85 0.0060 0.0049

Mercury -73942-03-16 14:08 J -25285818.03 -25285817.91 -25285817.77 0.0060 0.0043

Mercury -73942-06-12 15:06 J -25285729.99 -25285729.87 -25285729.71 0.0060 0.0038

Mercury -73942-09-08 16:47 J -25285641.95 -25285641.80 -25285641.64 0.0060 0.0033

Mercury -73942-12-05 17:44 J -25285553.91 -25285553.76 -25285553.58 0.0060 0.0028

Mercury -73941-03-02 19:11 J -25285465.86 -25285465.70 -25285465.52 0.0060 0.0022

Mercury -73941-05-29 20:23 J -25285377.82 -25285377.65 -25285377.46 0.0060 0.0017

Mercury -73941-08-25 21:49 J -25285289.77 -25285289.59 -25285289.40 0.0061 0.0011

Mercury -73941-11-21 23:16 J -25285201.71 -25285201.53 -25285201.34 0.0061 0.0005

Mercury -73940-02-18 00:42 J -25285113.66 -25285113.47 -25285113.28 0.0061 0.0001

Mercury -73940-05-17 01:54 J -25285025.60 -25285025.42 -25285025.23 0.0061 0.0006

Mercury -73940-08-13 03:06 J -25284937.54 -25284937.37 -25284937.18 0.0061 0.0012

Mercury -73940-11-09 04:18 J -25284849.48 -25284849.32 -25284849.12 0.0061 0.0018

Mercury -73939-02-05 05:59 J -25284761.42 -25284761.25 -25284761.07 0.0061 0.0023

Mercury -73939-05-04 07:11 J -25284673.36 -25284673.20 -25284673.03 0.0061 0.0029

Mercury -73939-07-31 08:23 J -25284585.29 -25284585.15 -25284584.98 0.0061 0.0035

Mercury -73939-10-27 09:35 J -25284497.22 -25284497.10 -25284496.94 0.0061 0.0041

Mercury -73938-01-23 11:16 J -25284409.14 -25284409.03 -25284408.90 0.0061 0.0047

Mercury -73938-04-21 12:28 J -25284321.06 -25284320.98 -25284320.87 0.0061 0.0053

Mercury -73938-07-18 13:54 J -25284232.96 -25284232.92 -25284232.85 0.0061 0.0059

Moon -73928-09-06 06:13 J -25280530.45 -25280530.24 -25280529.99 0.0065 0.0035

Earth -73928-09-06 08:23 J -25280530.35 -25280530.15 -25280529.89 0.0065 0.0033 \*

Venus -73927-09-01 02:08 J -25280170.56 -25280170.41 -25280170.22 0.0065 0.0044

Earth -73927-09-07 21:49 J -25280163.66 -25280163.59 -25280163.46 0.0065 0.0060

Moon -73927-09-08 01:11 J -25280163.50 -25280163.45 -25280163.37 0.0065 0.0063 \*

Venus -73926-04-14 07:40 J -25279945.40 -25279945.18 -25279944.95 0.0065 0.0012

Venus -73926-11-25 12:42 J -25279720.16 -25279719.97 -25279719.73 0.0066 0.0021

Venus -73925-07-07 18:28 J -25279494.85 -25279494.73 -25279494.58 0.0066 0.0053

Mercury -73849-04-23 18:56 J -25251810.75 -25251810.71 -25251810.66 0.0084 0.0079

Mercury -73849-07-20 20:23 J -25251722.73 -25251722.65 -25251722.57 0.0084 0.0067

Mercury -73849-10-16 21:49 J -25251634.69 -25251634.59 -25251634.48 0.0084 0.0056

Mercury -73848-01-12 23:16 J -25251546.64 -25251546.53 -25251546.41 0.0084 0.0045

Mercury -73848-04-11 00:42 J -25251458.59 -25251458.47 -25251458.34 0.0084 0.0034

Mercury -73848-07-08 02:08 J -25251370.54 -25251370.41 -25251370.28 0.0084 0.0023

Mercury -73848-10-04 03:35 J -25251282.49 -25251282.35 -25251282.22 0.0084 0.0012

Mercury -73848-12-31 05:01 J -25251194.43 -25251194.29 -25251194.16 0.0083 0.0003

Mercury -73847-03-29 06:13 J -25251106.37 -25251106.24 -25251106.10 0.0083 0.0010

Mercury -73847-06-25 07:40 J -25251018.31 -25251018.18 -25251018.05 0.0083 0.0020

Mercury -73847-09-21 08:52 J -25250930.25 -25250930.13 -25250930.00 0.0083 0.0031

Mercury -73847-12-18 10:18 J -25250842.19 -25250842.07 -25250841.95 0.0083 0.0041

Mercury -73846-03-16 11:30 J -25250754.12 -25250754.02 -25250753.91 0.0083 0.0052

Mercury -73846-06-12 12:42 J -25250666.05 -25250665.97 -25250665.87 0.0083 0.0062

Mercury -73846-09-08 14:08 J -25250577.97 -25250577.91 -25250577.84 0.0082 0.0072

Mercury -73846-12-05 15:20 J -25250489.86 -25250489.86 -25250489.84 0.0082 0.0082

Venus -73839-05-05 08:52 J -25248147.31 -25248147.13 -25248146.93 0.0079 0.0036

Venus -73839-12-16 18:13 J -25247921.95 -25247921.74 -25247921.53 0.0078 0.0017

Venus -73838-07-30 03:06 J -25247696.46 -25247696.37 -25247696.26 0.0078 0.0069

Mars -73838-11-12 03:20 J -25247591.53 -25247591.36 -25247591.16 0.0078 0.0058

Mercury -73694-01-13 17:01 J -25195297.83 -25195297.79 -25195297.74 0.0060 0.0057

Mercury -73694-04-11 17:59 J -25195209.82 -25195209.75 -25195209.64 0.0060 0.0052

Mercury -73694-07-08 19:11 J -25195121.80 -25195121.70 -25195121.57 0.0060 0.0047

Mercury -73694-10-04 20:52 J -25195033.76 -25195033.63 -25195033.50 0.0060 0.0042

Mercury -73694-12-31 21:49 J -25194945.72 -25194945.59 -25194945.43 0.0060 0.0036

Mercury -73693-03-28 23:01 J -25194857.68 -25194857.54 -25194857.36 0.0060 0.0031

Mercury -73693-06-25 00:28 J -25194769.64 -25194769.48 -25194769.30 0.0060 0.0025

Mercury -73693-09-21 01:54 J -25194681.59 -25194681.42 -25194681.24 0.0060 0.0020

Mercury -73693-12-18 03:06 J -25194593.54 -25194593.37 -25194593.18 0.0060 0.0015  
 Mercury -73692-03-16 04:32 J -25194505.49 -25194505.31 -25194505.12 0.0061 0.0009  
 Mercury -73692-06-12 05:44 J -25194417.44 -25194417.26 -25194417.07 0.0061 0.0004  
 Mercury -73692-09-08 07:11 J -25194329.39 -25194329.20 -25194329.01 0.0061 0.0002  
 Mercury -73692-12-05 08:23 J -25194241.33 -25194241.15 -25194240.96 0.0061 0.0008  
 Mercury -73691-03-03 09:35 J -25194153.27 -25194153.10 -25194152.91 0.0061 0.0014  
 Mercury -73691-05-30 11:16 J -25194065.21 -25194065.03 -25194064.85 0.0061 0.0019  
 Mercury -73691-08-26 12:13 J -25193977.15 -25193976.99 -25193976.81 0.0061 0.0025  
 Mercury -73691-11-22 13:25 J -25193889.08 -25193888.94 -25193888.76 0.0061 0.0031  
 Mercury -73690-02-18 15:06 J -25193801.01 -25193800.87 -25193800.71 0.0061 0.0037  
 Mercury -73690-05-17 16:18 J -25193712.94 -25193712.82 -25193712.67 0.0061 0.0043  
 Mercury -73690-08-13 17:30 J -25193624.86 -25193624.77 -25193624.64 0.0061 0.0049  
 Mercury -73690-11-09 18:56 J -25193536.78 -25193536.71 -25193536.61 0.0061 0.0054  
 Mercury -73689-02-05 20:08 J -25193448.67 -25193448.66 -25193448.60 0.0061 0.0061  
 Moon -73680-09-07 10:32 J -25189947.07 -25189947.06 -25189946.98 0.0065 0.0064  
 Moon -73679-09-08 17:44 J -25189580.99 -25189580.76 -25189580.51 0.0065 0.0024  
 Earth -73679-09-08 21:20 J -25189580.83 -25189580.61 -25189580.35 0.0065 0.0027 \*  
 Venus -73678-03-17 05:59 J -25189391.38 -25189391.25 -25189391.08 0.0065 0.0048  
 Venus -73678-10-28 11:30 J -25189166.23 -25189166.02 -25189165.79 0.0065 0.0017  
 Venus -73677-06-09 17:01 J -25188941.00 -25188940.79 -25188940.56 0.0066 0.0016  
 Venus -73676-01-20 22:04 J -25188715.71 -25188715.58 -25188715.40 0.0066 0.0049  
 Mercury -73601-11-12 02:52 J -25161026.44 -25161026.38 -25161026.31 0.0084 0.0074  
 Mercury -73600-02-08 04:18 J -25160938.41 -25160938.32 -25160938.23 0.0084 0.0063  
 Mercury -73600-05-07 05:44 J -25160850.36 -25160850.26 -25160850.15 0.0084 0.0052  
 Mercury -73600-08-03 07:11 J -25160762.32 -25160762.20 -25160762.08 0.0084 0.0041  
 Mercury -73600-10-30 08:37 J -25160674.27 -25160674.14 -25160674.01 0.0084 0.0030  
 Mercury -73599-01-26 10:04 J -25160586.21 -25160586.08 -25160585.95 0.0084 0.0019  
 Mercury -73599-04-24 11:30 J -25160498.16 -25160498.02 -25160497.88 0.0083 0.0008  
 Mercury -73599-07-21 12:56 J -25160410.10 -25160409.96 -25160409.83 0.0083 0.0003  
 Mercury -73599-10-17 14:08 J -25160322.04 -25160321.91 -25160321.77 0.0083 0.0013

Mercury -73598-01-13 15:20 J -25160233.98 -25160233.86 -25160233.72 0.0083 0.0024

Mercury -73598-04-11 17:01 J -25160145.92 -25160145.79 -25160145.67 0.0083 0.0034

Mercury -73598-07-08 17:59 J -25160057.85 -25160057.75 -25160057.62 0.0083 0.0045

Mercury -73598-10-04 19:25 J -25159969.78 -25159969.69 -25159969.58 0.0083 0.0055

Mercury -73598-12-31 20:37 J -25159881.71 -25159881.64 -25159881.55 0.0083 0.0065

Mercury -73597-03-28 21:49 J -25159793.63 -25159793.59 -25159793.52 0.0082 0.0076

Earth -73591-03-16 03:49 J -25157615.57 -25157615.34 -25157615.08 0.0079 0.0021

Moon -73591-03-16 07:25 J -25157615.42 -25157615.19 -25157614.93 0.0079 0.0022 \*

Venus -73591-11-18 14:08 J -25157368.09 -25157367.91 -25157367.71 0.0079 0.0039

Venus -73590-07-01 23:30 J -25157142.73 -25157142.52 -25157142.31 0.0078 0.0014

Venus -73589-02-12 08:37 J -25156917.25 -25156917.14 -25156917.03 0.0078 0.0066

Mercury -73446-05-07 22:32 J -25104601.56 -25104601.56 -25104601.53 0.0060 0.0060

Mercury -73446-08-03 23:59 J -25104513.57 -25104513.50 -25104513.42 0.0060 0.0054

Mercury -73446-10-31 00:56 J -25104425.55 -25104425.46 -25104425.34 0.0060 0.0049

Mercury -73445-01-27 02:08 J -25104337.52 -25104337.41 -25104337.26 0.0060 0.0044

Mercury -73445-04-24 03:35 J -25104249.48 -25104249.35 -25104249.19 0.0060 0.0039

Mercury -73445-07-21 04:47 J -25104161.44 -25104161.30 -25104161.13 0.0060 0.0033

Mercury -73445-10-17 06:13 J -25104073.40 -25104073.24 -25104073.07 0.0060 0.0028

Mercury -73444-01-13 07:25 J -25103985.35 -25103985.19 -25103985.01 0.0060 0.0022

Mercury -73444-04-11 08:52 J -25103897.30 -25103897.13 -25103896.95 0.0060 0.0017

Mercury -73444-07-08 10:04 J -25103809.25 -25103809.08 -25103808.89 0.0061 0.0012

Mercury -73444-10-04 11:30 J -25103721.20 -25103721.02 -25103720.83 0.0061 0.0006

Mercury -73444-12-31 12:56 J -25103633.15 -25103632.96 -25103632.78 0.0061 0.0001

Mercury -73443-03-29 14:08 J -25103545.09 -25103544.91 -25103544.72 0.0061 0.0006

Mercury -73443-06-25 15:35 J -25103457.04 -25103456.85 -25103456.67 0.0061 0.0011

Mercury -73443-09-21 16:32 J -25103368.98 -25103368.81 -25103368.62 0.0061 0.0017

Mercury -73443-12-18 17:44 J -25103280.91 -25103280.76 -25103280.57 0.0061 0.0023

Mercury -73442-03-16 19:25 J -25103192.85 -25103192.69 -25103192.52 0.0061 0.0028

Mercury -73442-06-12 20:37 J -25103104.78 -25103104.64 -25103104.47 0.0061 0.0034

Mercury -73442-09-08 21:49 J -25103016.71 -25103016.59 -25103016.43 0.0061 0.0040



Mercury -73442-12-05 23:30 J -25102928.64 -25102928.52 -25102928.39 0.0061 0.0046

Mercury -73441-03-03 00:42 J -25102840.56 -25102840.47 -25102840.36 0.0061 0.0052

Mercury -73441-05-30 01:54 J -25102752.46 -25102752.42 -25102752.33 0.0061 0.0058

Earth -73431-09-09 23:44 J -25098997.78 -25098997.51 -25098997.25 0.0065 0.0001

Moon -73431-09-10 02:52 J -25098997.65 -25098997.38 -25098997.11 0.0065 0.0002 \*

Venus -73430-09-30 11:16 J -25098612.15 -25098612.03 -25098611.86 0.0065 0.0049

Venus -73429-05-12 16:47 J -25098387.00 -25098386.80 -25098386.56 0.0065 0.0018

Venus -73429-12-23 22:18 J -25098161.78 -25098161.57 -25098161.34 0.0066 0.0016

Venus -73428-08-06 04:04 J -25097936.48 -25097936.33 -25097936.17 0.0066 0.0048

Mercury -73352-03-06 10:04 J -25070330.13 -25070330.08 -25070330.02 0.0084 0.0077

Mercury -73352-06-02 11:30 J -25070242.10 -25070242.02 -25070241.93 0.0084 0.0066

Mercury -73352-08-29 12:56 J -25070154.06 -25070153.96 -25070153.85 0.0084 0.0055

Mercury -73352-11-25 14:23 J -25070066.01 -25070065.90 -25070065.78 0.0084 0.0044

Mercury -73351-02-21 15:49 J -25069977.96 -25069977.84 -25069977.71 0.0084 0.0033

Mercury -73351-05-20 17:16 J -25069889.91 -25069889.78 -25069889.64 0.0084 0.0022

Mercury -73351-08-16 18:42 J -25069801.85 -25069801.72 -25069801.58 0.0083 0.0011

Mercury -73351-11-12 20:08 J -25069713.80 -25069713.66 -25069713.52 0.0083 0.0001

Mercury -73350-02-08 21:35 J -25069625.74 -25069625.60 -25069625.47 0.0083 0.0010

Mercury -73350-05-07 22:47 J -25069537.68 -25069537.55 -25069537.41 0.0083 0.0021

Mercury -73350-08-04 00:13 J -25069449.61 -25069449.49 -25069449.36 0.0083 0.0031

Mercury -73350-10-31 01:25 J -25069361.55 -25069361.44 -25069361.31 0.0083 0.0042

Mercury -73349-01-27 02:52 J -25069273.48 -25069273.38 -25069273.27 0.0083 0.0052

Mercury -73349-04-24 03:49 J -25069185.41 -25069185.34 -25069185.23 0.0083 0.0063

Mercury -73349-07-21 05:16 J -25069097.33 -25069097.28 -25069097.20 0.0082 0.0073

Mercury -73349-10-17 06:56 J -25069009.21 -25069009.21 -25069009.21 0.0082 0.0082

Moon -73343-03-16 22:32 J -25067032.78 -25067032.56 -25067032.33 0.0079 0.0033

Earth -73343-03-17 00:56 J -25067032.68 -25067032.46 -25067032.21 0.0079 0.0029 \*

Venus -73342-06-03 21:35 J -25066588.79 -25066588.60 -25066588.40 0.0079 0.0034

Venus -73341-01-15 06:42 J -25066363.42 -25066363.22 -25066363.00 0.0078 0.0019

Venus -73341-08-27 15:35 J -25066137.92 -25066137.85 -25066137.75 0.0078 0.0071

Mercury -73198-11-26 05:01 J -25013817.32 -25013817.29 -25013817.23 0.0060 0.0058

Mercury -73197-02-22 05:59 J -25013729.31 -25013729.25 -25013729.13 0.0060 0.0053

Mercury -73197-05-20 07:40 J -25013641.28 -25013641.18 -25013641.06 0.0060 0.0048

Mercury -73197-08-16 08:52 J -25013553.25 -25013553.13 -25013552.99 0.0060 0.0042

Mercury -73197-11-12 09:49 J -25013465.21 -25013465.09 -25013464.92 0.0060 0.0038

Mercury -73196-02-08 11:30 J -25013377.17 -25013377.02 -25013376.85 0.0060 0.0031

Mercury -73196-05-07 12:28 J -25013289.13 -25013288.98 -25013288.79 0.0060 0.0027

Mercury -73196-08-03 14:09 J -25013201.08 -25013200.91 -25013200.73 0.0060 0.0021

Mercury -73196-10-30 15:06 J -25013113.03 -25013112.87 -25013112.67 0.0060 0.0016

Mercury -73195-01-26 16:47 J -25013024.98 -25013024.80 -25013024.62 0.0061 0.0010

Mercury -73195-04-24 17:59 J -25012936.93 -25012936.75 -25012936.56 0.0061 0.0004

Mercury -73195-07-21 19:25 J -25012848.88 -25012848.69 -25012848.50 0.0061 0.0002

Mercury -73195-10-17 20:37 J -25012760.82 -25012760.64 -25012760.45 0.0061 0.0007

Mercury -73194-01-13 21:49 J -25012672.76 -25012672.59 -25012672.40 0.0061 0.0013

Mercury -73194-04-11 23:16 J -25012584.70 -25012584.53 -25012584.35 0.0061 0.0018

Mercury -73194-07-09 00:28 J -25012496.64 -25012496.48 -25012496.30 0.0061 0.0024

Mercury -73194-10-05 01:40 J -25012408.58 -25012408.43 -25012408.25 0.0061 0.0030

Mercury -73193-01-01 03:21 J -25012320.51 -25012320.36 -25012320.21 0.0061 0.0035

Mercury -73193-03-29 04:33 J -25012232.44 -25012232.31 -25012232.16 0.0061 0.0041

Mercury -73193-06-25 05:45 J -25012144.36 -25012144.26 -25012144.13 0.0061 0.0047

Mercury -73193-09-21 06:57 J -25012056.28 -25012056.21 -25012056.09 0.0061 0.0053

Mercury -73193-12-18 08:52 J -25011968.18 -25011968.13 -25011968.08 0.0061 0.0059

Moon -73183-09-10 19:54 J -25008414.88 -25008414.67 -25008414.43 0.0065 0.0032

Earth -73183-09-10 22:47 J -25008414.77 -25008414.55 -25008414.32 0.0065 0.0033 \*

Earth -73182-09-12 11:30 J -25008048.10 -25008048.02 -25008047.88 0.0065 0.0059

Moon -73182-09-12 11:59 J -25008048.10 -25008048.00 -25008047.84 0.0065 0.0057 \*

Venus -73181-04-14 15:06 J -25007832.98 -25007832.87 -25007832.73 0.0065 0.0054

Venus -73181-11-25 20:37 J -25007607.85 -25007607.64 -25007607.42 0.0065 0.0022

Venus -73180-07-09 02:09 J -25007382.63 -25007382.41 -25007382.18 0.0066 0.0011

Venus -73179-02-19 07:25 J -25007157.34 -25007157.19 -25007157.00 0.0066 0.0044

Mercury -73104-09-24 17:45 J -24979545.81 -24979545.76 -24979545.68 0.0084 0.0074

Mercury -73104-12-21 19:11 J -24979457.78 -24979457.70 -24979457.59 0.0084 0.0063

Mercury -73103-03-19 20:52 J -24979369.73 -24979369.63 -24979369.52 0.0084 0.0051

Mercury -73103-06-15 22:18 J -24979281.69 -24979281.57 -24979281.44 0.0084 0.0040

Mercury -73103-09-11 23:45 J -24979193.64 -24979193.51 -24979193.38 0.0084 0.0029

Mercury -73103-12-09 01:11 J -24979105.58 -24979105.45 -24979105.31 0.0084 0.0018

Mercury -73102-03-07 02:37 J -24979017.53 -24979017.39 -24979017.25 0.0083 0.0007

Mercury -73102-06-03 04:04 J -24978929.47 -24978929.33 -24978929.19 0.0083 0.0003

Mercury -73102-08-30 05:16 J -24978841.41 -24978841.28 -24978841.14 0.0083 0.0015

Mercury -73102-11-26 06:42 J -24978753.35 -24978753.22 -24978753.09 0.0083 0.0025

Mercury -73101-02-22 08:09 J -24978665.28 -24978665.16 -24978665.04 0.0083 0.0035

Mercury -73101-05-20 09:21 J -24978577.22 -24978577.11 -24978576.99 0.0083 0.0046

Mercury -73101-08-16 10:33 J -24978489.15 -24978489.06 -24978488.95 0.0083 0.0056

Mercury -73101-11-12 11:59 J -24978401.07 -24978401.00 -24978400.91 0.0083 0.0066

Mercury -73100-02-08 13:25 J -24978312.99 -24978312.94 -24978312.89 0.0082 0.0076

Earth -73094-03-19 20:37 J -24976082.72 -24976082.64 -24976082.51 0.0079 0.0072

Moon -73094-03-19 21:35 J -24976082.69 -24976082.60 -24976082.51 0.0079 0.0073 \*

Venus -73094-12-18 02:52 J -24975809.56 -24975809.38 -24975809.17 0.0079 0.0037

Venus -73093-07-30 12:13 J -24975584.20 -24975583.99 -24975583.78 0.0078 0.0017

Venus -73092-03-12 20:37 J -24975358.72 -24975358.64 -24975358.52 0.0078 0.0069

# 73RD MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 73rd millennium BCE.**

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Mercury	-72949-06-15 11:59 J	-24923033.06	-24923033.00	-24923032.92	0.0060	0.0056
Mercury	-72949-09-11 13:11 J	-24922945.04	-24922944.95	-24922944.84	0.0060	0.0050
Mercury	-72949-12-08 14:09 J	-24922857.01	-24922856.91	-24922856.76	0.0060	0.0045
Mercury	-72948-03-06 15:49 J	-24922768.97	-24922768.84	-24922768.70	0.0060	0.0040
Mercury	-72948-06-02 16:47 J	-24922680.93	-24922680.80	-24922680.63	0.0060	0.0035
Mercury	-72948-08-29 17:59 J	-24922592.89	-24922592.75	-24922592.57	0.0060	0.0030
Mercury	-72948-11-25 19:25 J	-24922504.85	-24922504.69	-24922504.51	0.0060	0.0024
Mercury	-72947-02-21 20:37 J	-24922416.80	-24922416.64	-24922416.45	0.0060	0.0019
Mercury	-72947-05-20 22:04 J	-24922328.75	-24922328.58	-24922328.39	0.0061	0.0013
Mercury	-72947-08-16 23:30 J	-24922240.70	-24922240.52	-24922240.33	0.0061	0.0007
Mercury	-72947-11-13 00:57 J	-24922152.65	-24922152.46	-24922152.28	0.0061	0.0002
Mercury	-72946-02-09 02:09 J	-24922064.60	-24922064.41	-24922064.22	0.0061	0.0004
Mercury	-72946-05-08 03:21 J	-24921976.54	-24921976.36	-24921976.17	0.0061	0.0010
Mercury	-72946-08-04 04:47 J	-24921888.48	-24921888.30	-24921888.12	0.0061	0.0015
Mercury	-72946-10-31 05:59 J	-24921800.42	-24921800.25	-24921800.07	0.0061	0.0021
Mercury	-72945-01-27 07:11 J	-24921712.36	-24921712.20	-24921712.02	0.0061	0.0027
Mercury	-72945-04-24 08:37 J	-24921624.29	-24921624.14	-24921623.97	0.0061	0.0032
Mercury	-72945-07-21 09:49 J	-24921536.22	-24921536.09	-24921535.93	0.0061	0.0038
Mercury	-72945-10-17 11:01 J	-24921448.15	-24921448.04	-24921447.89	0.0061	0.0044
Mercury	-72944-01-13 12:57 J	-24921360.07	-24921359.96	-24921359.85	0.0061	0.0050
Mercury	-72944-04-11 13:54 J	-24921271.98	-24921271.92	-24921271.83	0.0061	0.0056
Earth	-72935-09-11 23:16 J	-24917831.57	-24917831.53	-24917831.41	0.0065	0.0062
Moon	-72935-09-12 00:57 J	-24917831.57	-24917831.46	-24917831.33	0.0065	0.0058 *
Earth	-72934-09-13 12:42 J	-24917465.18	-24917464.97	-24917464.72	0.0065	0.0030
Moon	-72934-09-13 13:25 J	-24917465.15	-24917464.94	-24917464.69	0.0065	0.0028 *
Venus	-72933-10-28 19:54 J	-24917053.77	-24917053.67	-24917053.54	0.0065	0.0056
Venus	-72932-06-11 01:25 J	-24916828.64	-24916828.44	-24916828.22	0.0066	0.0024
Venus	-72931-01-22 07:11 J	-24916603.42	-24916603.20	-24916602.97	0.0066	0.0009

Venus -72931-09-04 12:28 J -24916378.14 -24916377.98 -24916377.79 0.0066 0.0042  
 Mars -72930-05-14 17:01 J -24916125.84 -24916125.79 -24916125.69 0.0066 0.0065  
 Mercury -72855-01-17 00:42 J -24888849.51 -24888849.47 -24888849.40 0.0084 0.0078  
 Mercury -72855-04-15 02:23 J -24888761.48 -24888761.40 -24888761.31 0.0084 0.0067  
 Mercury -72855-07-12 03:49 J -24888673.44 -24888673.34 -24888673.23 0.0084 0.0055  
 Mercury -72855-10-08 05:30 J -24888585.39 -24888585.27 -24888585.16 0.0084 0.0044  
 Mercury -72854-01-04 06:42 J -24888497.34 -24888497.22 -24888497.09 0.0084 0.0034  
 Mercury -72854-04-02 08:09 J -24888409.29 -24888409.16 -24888409.02 0.0084 0.0023  
 Mercury -72854-06-29 09:35 J -24888321.23 -24888321.10 -24888320.96 0.0083 0.0012  
 Mercury -72854-09-25 11:01 J -24888233.18 -24888233.04 -24888232.90 0.0083 0.0002  
 Mercury -72854-12-22 12:28 J -24888145.12 -24888144.98 -24888144.84 0.0083 0.0010  
 Mercury -72853-03-19 13:54 J -24888057.06 -24888056.92 -24888056.79 0.0083 0.0020  
 Mercury -72853-06-15 15:06 J -24887968.99 -24887968.87 -24887968.74 0.0083 0.0031  
 Mercury -72853-09-11 16:33 J -24887880.93 -24887880.81 -24887880.69 0.0083 0.0041  
 Mercury -72853-12-08 17:30 J -24887792.86 -24887792.77 -24887792.65 0.0083 0.0052  
 Mercury -72852-03-06 18:57 J -24887704.79 -24887704.71 -24887704.61 0.0083 0.0062  
 Mercury -72852-06-02 20:23 J -24887616.71 -24887616.65 -24887616.58 0.0082 0.0072  
 Mercury -72852-08-29 21:35 J -24887528.60 -24887528.60 -24887528.57 0.0082 0.0082  
 Moon -72846-03-20 15:06 J -24885500.12 -24885499.87 -24885499.60 0.0079 0.0014  
 Earth -72846-03-20 16:47 J -24885500.05 -24885499.80 -24885499.55 0.0079 0.0017 \*  
 Venus -72845-07-02 09:35 J -24885030.29 -24885030.10 -24885029.90 0.0078 0.0034  
 Venus -72844-02-12 18:28 J -24884804.93 -24884804.73 -24884804.51 0.0078 0.0019  
 Venus -72844-09-26 03:06 J -24884579.44 -24884579.37 -24884579.26 0.0078 0.0071  
 Mercury -72701-10-07 16:47 J -24832336.80 -24832336.80 -24832336.77 0.0060 0.0060  
 Mercury -72700-01-03 17:45 J -24832248.81 -24832248.76 -24832248.66 0.0060 0.0055  
 Mercury -72700-04-01 19:25 J -24832160.79 -24832160.69 -24832160.58 0.0060 0.0049  
 Mercury -72700-06-28 20:23 J -24832072.75 -24832072.65 -24832072.51 0.0060 0.0045  
 Mercury -72700-09-24 21:35 J -24831984.72 -24831984.60 -24831984.44 0.0060 0.0039  
 Mercury -72700-12-21 23:01 J -24831896.68 -24831896.54 -24831896.37 0.0060 0.0034  
 Mercury -72699-03-20 00:13 J -24831808.64 -24831808.49 -24831808.31 0.0060 0.0029

Mercury -72699-06-16 01:40 J -24831720.59 -24831720.43 -24831720.25 0.0060 0.0023

Mercury -72699-09-12 02:52 J -24831632.55 -24831632.38 -24831632.19 0.0060 0.0018

Mercury -72699-12-09 04:18 J -24831544.50 -24831544.32 -24831544.13 0.0061 0.0012

Mercury -72698-03-07 05:30 J -24831456.45 -24831456.27 -24831456.08 0.0061 0.0007

Mercury -72698-06-03 06:57 J -24831368.39 -24831368.21 -24831368.02 0.0061 0.0001

Mercury -72698-08-30 08:09 J -24831280.34 -24831280.16 -24831279.97 0.0061 0.0005

Mercury -72698-11-26 09:35 J -24831192.28 -24831192.10 -24831191.92 0.0061 0.0010

Mercury -72697-02-22 10:47 J -24831104.23 -24831104.05 -24831103.86 0.0061 0.0016

Mercury -72697-05-20 11:59 J -24831016.16 -24831016.00 -24831015.81 0.0061 0.0022

Mercury -72697-08-16 13:25 J -24830928.10 -24830927.94 -24830927.77 0.0061 0.0027

Mercury -72697-11-12 14:37 J -24830840.04 -24830839.89 -24830839.72 0.0061 0.0033

Mercury -72696-02-08 16:18 J -24830751.97 -24830751.82 -24830751.68 0.0061 0.0039

Mercury -72696-05-07 17:16 J -24830663.89 -24830663.78 -24830663.64 0.0061 0.0045

Mercury -72696-08-03 18:28 J -24830575.81 -24830575.73 -24830575.60 0.0061 0.0051

Mercury -72696-10-30 19:40 J -24830487.72 -24830487.68 -24830487.58 0.0061 0.0057

Moon -72686-09-14 08:52 J -24826882.39 -24826882.13 -24826881.86 0.0065 0.0007

Earth -72686-09-14 10:47 J -24826882.30 -24826882.05 -24826881.78 0.0065 0.0008 \*

Venus -72684-05-13 22:33 J -24826274.61 -24826274.56 -24826274.48 0.0065 0.0063

Venus -72684-12-25 03:49 J -24826049.52 -24826049.34 -24826049.12 0.0066 0.0031

Venus -72683-08-07 09:49 J -24825824.32 -24825824.09 -24825823.86 0.0066 0.0002

Venus -72682-03-20 15:06 J -24825599.05 -24825598.87 -24825598.67 0.0066 0.0036

Mars -72682-08-20 17:16 J -24825446.08 -24825445.78 -24825445.48 0.0066 0.0036

Mercury -72607-08-07 08:09 J -24798065.20 -24798065.16 -24798065.09 0.0084 0.0076

Mercury -72607-11-03 09:49 J -24797977.17 -24797977.09 -24797977.00 0.0084 0.0065

Mercury -72606-01-30 11:01 J -24797889.13 -24797889.04 -24797888.92 0.0084 0.0054

Mercury -72606-04-28 12:28 J -24797801.08 -24797800.98 -24797800.85 0.0084 0.0043

Mercury -72606-07-25 14:09 J -24797713.03 -24797712.91 -24797712.78 0.0084 0.0032

Mercury -72606-10-21 15:35 J -24797624.98 -24797624.85 -24797624.71 0.0084 0.0021

Mercury -72605-01-17 17:01 J -24797536.92 -24797536.79 -24797536.65 0.0083 0.0010

Mercury -72605-04-14 18:28 J -24797448.87 -24797448.73 -24797448.59 0.0083 0.0001

Mercury -72605-07-11 19:54 J -24797360.81 -24797360.67 -24797360.53 0.0083 0.0012

Mercury -72605-10-07 21:06 J -24797272.75 -24797272.62 -24797272.48 0.0083 0.0022

Mercury -72604-01-03 22:18 J -24797184.68 -24797184.57 -24797184.43 0.0083 0.0033

Mercury -72604-04-01 23:45 J -24797096.62 -24797096.51 -24797096.38 0.0083 0.0043

Mercury -72604-06-29 01:11 J -24797008.55 -24797008.45 -24797008.34 0.0083 0.0053

Mercury -72604-09-25 02:23 J -24796920.47 -24796920.40 -24796920.30 0.0083 0.0064

Mercury -72604-12-22 03:35 J -24796832.39 -24796832.35 -24796832.27 0.0082 0.0074

Earth -72598-03-21 07:40 J -24794917.35 -24794917.18 -24794916.98 0.0080 0.0054

Moon -72598-03-21 10:18 J -24794917.22 -24794917.07 -24794916.87 0.0080 0.0057 \*

Venus -72596-01-15 13:40 J -24794251.11 -24794250.93 -24794250.74 0.0078 0.0040

Venus -72596-08-28 22:47 J -24794025.76 -24794025.55 -24794025.33 0.0078 0.0013

Venus -72595-04-11 07:25 J -24793800.29 -24793800.19 -24793800.06 0.0078 0.0065

Mercury -72452-04-27 23:16 J -24741552.56 -24741552.53 -24741552.47 0.0060 0.0058

Mercury -72452-07-25 00:28 J -24741464.55 -24741464.48 -24741464.38 0.0060 0.0053

Mercury -72452-10-21 01:25 J -24741376.52 -24741376.44 -24741376.30 0.0060 0.0049

Mercury -72451-01-17 03:06 J -24741288.49 -24741288.37 -24741288.23 0.0060 0.0043

Mercury -72451-04-15 04:18 J -24741200.45 -24741200.32 -24741200.16 0.0060 0.0037

Mercury -72451-07-12 05:16 J -24741112.41 -24741112.28 -24741112.10 0.0060 0.0033

Mercury -72451-10-08 06:57 J -24741024.37 -24741024.21 -24741024.04 0.0060 0.0027

Mercury -72450-01-04 07:54 J -24740936.33 -24740936.17 -24740935.98 0.0060 0.0022

Mercury -72450-04-02 09:35 J -24740848.28 -24740848.10 -24740847.92 0.0060 0.0016

Mercury -72450-06-29 10:33 J -24740760.23 -24740760.06 -24740759.86 0.0061 0.0011

Mercury -72450-09-25 12:13 J -24740672.18 -24740671.99 -24740671.81 0.0061 0.0005

Mercury -72450-12-22 13:25 J -24740584.13 -24740583.94 -24740583.75 0.0061 0.0001

Mercury -72449-03-19 14:37 J -24740496.07 -24740495.89 -24740495.70 0.0061 0.0006

Mercury -72449-06-15 15:49 J -24740408.02 -24740407.84 -24740407.65 0.0061 0.0012

Mercury -72449-09-11 17:01 J -24740319.96 -24740319.79 -24740319.60 0.0061 0.0018

Mercury -72449-12-08 18:28 J -24740231.90 -24740231.73 -24740231.55 0.0061 0.0023

Mercury -72448-03-06 19:40 J -24740143.83 -24740143.68 -24740143.50 0.0061 0.0029

Mercury -72448-06-02 21:06 J -24740055.77 -24740055.62 -24740055.46 0.0061 0.0035

Mercury -72448-08-29 22:18 J -24739967.70 -24739967.57 -24739967.42 0.0061 0.0040

Mercury -72448-11-25 23:30 J -24739879.62 -24739879.52 -24739879.38 0.0061 0.0046

Mercury -72447-02-22 01:11 J -24739791.54 -24739791.45 -24739791.34 0.0061 0.0052

Mercury -72447-05-21 02:23 J -24739703.45 -24739703.40 -24739703.32 0.0061 0.0058

Earth -72438-09-15 09:49 J -24736299.27 -24736299.09 -24736298.86 0.0065 0.0041

Moon -72438-09-15 12:57 J -24736299.14 -24736298.96 -24736298.72 0.0065 0.0038 \*

Moon -72437-09-15 19:25 J -24735932.84 -24735932.69 -24735932.49 0.0065 0.0048

Earth -72437-09-15 22:47 J -24735932.68 -24735932.55 -24735932.36 0.0065 0.0051 \*

Venus -72435-07-10 07:40 J -24735270.35 -24735270.18 -24735269.97 0.0066 0.0035

Venus -72434-02-20 13:25 J -24735045.16 -24735044.94 -24735044.71 0.0066 0.0002

Venus -72434-10-03 18:42 J -24734819.91 -24734819.72 -24734819.51 0.0066 0.0032

Mars -72434-11-26 21:21 J -24734765.94 -24734765.61 -24734765.25 0.0066 0.0016

Venus -72433-05-15 23:59 J -24734594.51 -24734594.50 -24734594.43 0.0066 0.0065

Mercury -72359-11-29 14:37 J -24707368.90 -24707368.89 -24707368.87 0.0084 0.0084

Mercury -72358-02-25 16:04 J -24707280.89 -24707280.83 -24707280.75 0.0084 0.0072

Mercury -72358-05-24 17:30 J -24707192.85 -24707192.77 -24707192.67 0.0084 0.0061

Mercury -72358-08-20 18:57 J -24707104.81 -24707104.71 -24707104.59 0.0084 0.0050

Mercury -72358-11-16 20:37 J -24707016.76 -24707016.64 -24707016.52 0.0084 0.0039

Mercury -72357-02-12 22:04 J -24706928.71 -24706928.58 -24706928.45 0.0084 0.0028

Mercury -72357-05-10 23:16 J -24706840.66 -24706840.53 -24706840.39 0.0084 0.0018

Mercury -72357-08-07 00:57 J -24706752.60 -24706752.46 -24706752.33 0.0083 0.0007

Mercury -72357-11-03 02:09 J -24706664.54 -24706664.41 -24706664.27 0.0083 0.0005

Mercury -72356-01-30 03:35 J -24706576.48 -24706576.35 -24706576.21 0.0083 0.0015

Mercury -72356-04-28 05:01 J -24706488.42 -24706488.29 -24706488.16 0.0083 0.0025

Mercury -72356-07-25 06:13 J -24706400.36 -24706400.24 -24706400.11 0.0083 0.0036

Mercury -72356-10-21 07:40 J -24706312.29 -24706312.18 -24706312.06 0.0083 0.0046

Mercury -72355-01-17 09:06 J -24706224.22 -24706224.12 -24706224.02 0.0083 0.0056

Mercury -72355-04-15 10:33 J -24706136.14 -24706136.06 -24706135.98 0.0082 0.0066

Mercury -72355-07-12 11:30 J -24706048.06 -24706048.02 -24706047.96 0.0082 0.0076

Earth -72349-03-23 02:52 J -24703967.57 -24703967.38 -24703967.15 0.0079 0.0046



Moon	-72349-03-23 06:28 J	-24703967.44	-24703967.23	-24703967.00	0.0079	0.0043	*
Venus	-72348-07-31 18:42 J	-24703471.90	-24703471.72	-24703471.54	0.0078	0.0043	
Venus	-72347-03-14 03:21 J	-24703246.56	-24703246.36	-24703246.14	0.0078	0.0010	
Venus	-72347-10-25 11:59 J	-24703021.11	-24703021.00	-24703020.86	0.0078	0.0062	
Mercury	-72204-11-16 05:30 J	-24650768.31	-24650768.27	-24650768.21	0.0060	0.0057	
Mercury	-72203-02-12 06:28 J	-24650680.30	-24650680.23	-24650680.12	0.0060	0.0052	
Mercury	-72203-05-11 07:40 J	-24650592.28	-24650592.18	-24650592.05	0.0060	0.0047	
Mercury	-72203-08-07 08:52 J	-24650504.24	-24650504.13	-24650503.98	0.0060	0.0042	
Mercury	-72203-11-03 10:18 J	-24650416.21	-24650416.07	-24650415.91	0.0060	0.0037	
Mercury	-72202-01-30 11:30 J	-24650328.17	-24650328.02	-24650327.85	0.0060	0.0031	
Mercury	-72202-04-28 12:42 J	-24650240.12	-24650239.97	-24650239.79	0.0060	0.0026	
Mercury	-72202-07-25 14:09 J	-24650152.08	-24650151.91	-24650151.73	0.0060	0.0021	
Mercury	-72202-10-21 15:21 J	-24650064.03	-24650063.86	-24650063.67	0.0060	0.0015	
Mercury	-72201-01-17 16:47 J	-24649975.98	-24649975.80	-24649975.61	0.0061	0.0010	
Mercury	-72201-04-14 17:59 J	-24649887.93	-24649887.75	-24649887.56	0.0061	0.0005	
Mercury	-72201-07-11 19:25 J	-24649799.88	-24649799.69	-24649799.50	0.0061	0.0001	
Mercury	-72201-10-07 20:37 J	-24649711.82	-24649711.64	-24649711.45	0.0061	0.0007	
Mercury	-72200-01-03 22:04 J	-24649623.77	-24649623.58	-24649623.40	0.0061	0.0012	
Mercury	-72200-04-01 23:01 J	-24649535.71	-24649535.54	-24649535.35	0.0061	0.0018	
Mercury	-72200-06-29 00:42 J	-24649447.65	-24649447.47	-24649447.30	0.0061	0.0023	
Mercury	-72200-09-25 01:40 J	-24649359.58	-24649359.43	-24649359.25	0.0061	0.0029	
Mercury	-72200-12-22 02:52 J	-24649271.52	-24649271.38	-24649271.21	0.0061	0.0035	
Mercury	-72199-03-20 04:18 J	-24649183.45	-24649183.32	-24649183.17	0.0061	0.0041	
Mercury	-72199-06-16 05:30 J	-24649095.37	-24649095.27	-24649095.13	0.0061	0.0047	
Mercury	-72199-09-12 06:42 J	-24649007.29	-24649007.22	-24649007.10	0.0061	0.0053	
Mercury	-72199-12-09 08:37 J	-24648919.20	-24648919.14	-24648919.08	0.0061	0.0058	
Earth	-72189-09-16 20:52 J	-24645349.89	-24645349.63	-24645349.37	0.0065	0.0012	
Moon	-72189-09-17 00:13 J	-24645349.74	-24645349.49	-24645349.22	0.0065	0.0013	*
Venus	-72186-01-23 10:18 J	-24644491.24	-24644491.07	-24644490.89	0.0066	0.0042	
Venus	-72186-09-05 15:49 J	-24644266.06	-24644265.84	-24644265.61	0.0066	0.0009	

Mars -72185-03-03 20:23 J -24644085.98 -24644085.65 -24644085.28 0.0066 0.0015  
 Venus -72185-04-17 21:06 J -24644040.82 -24644040.62 -24644040.40 0.0066 0.0024  
 Venus -72185-11-29 02:52 J -24643815.48 -24643815.38 -24643815.26 0.0066 0.0058  
 Mercury -72110-06-19 21:35 J -24616584.60 -24616584.60 -24616584.56 0.0084 0.0084  
 Mercury -72110-09-15 23:01 J -24616496.59 -24616496.54 -24616496.45 0.0084 0.0072  
 Mercury -72110-12-13 00:28 J -24616408.56 -24616408.48 -24616408.37 0.0084 0.0061  
 Mercury -72109-03-10 02:09 J -24616320.51 -24616320.41 -24616320.29 0.0084 0.0050  
 Mercury -72109-06-06 03:35 J -24616232.46 -24616232.35 -24616232.22 0.0084 0.0039  
 Mercury -72109-09-02 05:01 J -24616144.41 -24616144.29 -24616144.15 0.0084 0.0028  
 Mercury -72109-11-29 06:42 J -24616056.36 -24616056.22 -24616056.09 0.0084 0.0017  
 Mercury -72108-02-25 07:54 J -24615968.30 -24615968.17 -24615968.03 0.0083 0.0007  
 Mercury -72108-05-24 09:21 J -24615880.24 -24615880.11 -24615879.97 0.0083 0.0005  
 Mercury -72108-08-20 10:47 J -24615792.18 -24615792.05 -24615791.91 0.0083 0.0015  
 Mercury -72108-11-16 12:13 J -24615704.12 -24615703.99 -24615703.86 0.0083 0.0026  
 Mercury -72107-02-12 13:25 J -24615616.06 -24615615.94 -24615615.81 0.0083 0.0036  
 Mercury -72107-05-11 14:52 J -24615527.99 -24615527.88 -24615527.76 0.0083 0.0046  
 Mercury -72107-08-07 16:04 J -24615439.92 -24615439.83 -24615439.72 0.0083 0.0057  
 Mercury -72107-11-03 17:30 J -24615351.84 -24615351.77 -24615351.69 0.0083 0.0067  
 Mercury -72106-01-30 18:42 J -24615263.76 -24615263.72 -24615263.66 0.0082 0.0077  
 Moon -72101-03-23 13:54 J -24613385.13 -24613384.92 -24613384.67 0.0080 0.0034  
 Earth -72101-03-23 16:33 J -24613385.03 -24613384.81 -24613384.55 0.0080 0.0031 \*  
 Venus -72099-02-13 21:35 J -24612692.75 -24612692.60 -24612692.43 0.0078 0.0051  
 Venus -72099-09-27 06:42 J -24612467.43 -24612467.22 -24612467.00 0.0078 0.0003  
 Venus -72098-05-10 15:06 J -24612242.00 -24612241.87 -24612241.69 0.0078 0.0055

# 72ND MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 72nd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-71955-03-10 11:16 J	-24560072.03	-24560072.03	-24560072.02	0.0060	0.0060		
Mercury	-71955-06-06 11:59 J	-24559984.05	-24559984.00	-24559983.90	0.0060	0.0055		
Mercury	-71955-09-02 13:40 J	-24559896.03	-24559895.93	-24559895.82	0.0060	0.0050		
Mercury	-71955-11-29 14:52 J	-24559808.00	-24559807.88	-24559807.75	0.0060	0.0044		
Mercury	-71954-02-25 15:49 J	-24559719.96	-24559719.84	-24559719.68	0.0060	0.0040		
Mercury	-71954-05-24 17:01 J	-24559631.92	-24559631.79	-24559631.62	0.0060	0.0034		
Mercury	-71954-08-20 18:28 J	-24559543.88	-24559543.73	-24559543.56	0.0060	0.0029		
Mercury	-71954-11-16 19:40 J	-24559455.84	-24559455.68	-24559455.50	0.0060	0.0024		
Mercury	-71953-02-12 20:52 J	-24559367.79	-24559367.63	-24559367.44	0.0060	0.0019		
Mercury	-71953-05-10 22:18 J	-24559279.74	-24559279.57	-24559279.38	0.0061	0.0013		
Mercury	-71953-08-06 23:30 J	-24559191.69	-24559191.52	-24559191.32	0.0061	0.0008		
Mercury	-71953-11-03 00:57 J	-24559103.64	-24559103.46	-24559103.27	0.0061	0.0002		
Mercury	-71952-01-30 02:23 J	-24559015.59	-24559015.40	-24559015.22	0.0061	0.0004		
Mercury	-71952-04-28 03:21 J	-24558927.53	-24558927.36	-24558927.16	0.0061	0.0010		
Mercury	-71952-07-25 04:47 J	-24558839.48	-24558839.30	-24558839.11	0.0061	0.0015		
Mercury	-71952-10-21 05:45 J	-24558751.42	-24558751.26	-24558751.07	0.0061	0.0021		
Mercury	-71951-01-17 07:25 J	-24558663.35	-24558663.19	-24558663.02	0.0061	0.0026		
Mercury	-71951-04-15 08:23 J	-24558575.29	-24558575.15	-24558574.97	0.0061	0.0032		
Mercury	-71951-07-12 10:04 J	-24558487.22	-24558487.08	-24558486.93	0.0061	0.0037		
Mercury	-71951-10-08 11:01 J	-24558399.15	-24558399.04	-24558398.89	0.0061	0.0044		
Mercury	-71950-01-04 12:13 J	-24558311.07	-24558310.99	-24558310.85	0.0061	0.0050		
Mercury	-71950-04-02 14:09 J	-24558222.99	-24558222.91	-24558222.83	0.0061	0.0055		
Mercury	-71950-06-29 15:06 J	-24558134.88	-24558134.87	-24558134.82	0.0061	0.0061		
Moon	-71941-09-17 19:40 J	-24554766.92	-24554766.68	-24554766.42	0.0065	0.0013		
Earth	-71941-09-17 21:49 J	-24554766.84	-24554766.59	-24554766.33	0.0065	0.0016	*	

Venus -71938-08-08 15:06 J -24553712.03 -24553711.87 -24553711.69 0.0066 0.0043

Venus -71937-03-20 20:37 J -24553486.86 -24553486.64 -24553486.41 0.0066 0.0010

Mars -71937-06-10 04:04 J -24553405.65 -24553405.33 -24553404.99 0.0066 0.0025

Venus -71937-11-01 01:54 J -24553261.62 -24553261.42 -24553261.20 0.0066 0.0023

Venus -71936-06-14 07:54 J -24553036.29 -24553036.17 -24553036.06 0.0066 0.0057

Mercury -71861-01-08 05:45 J -24525800.30 -24525800.26 -24525800.20 0.0084 0.0078

Mercury -71861-04-05 07:11 J -24525712.27 -24525712.20 -24525712.10 0.0084 0.0067

Mercury -71861-07-02 08:37 J -24525624.23 -24525624.14 -24525624.02 0.0084 0.0056

Mercury -71861-09-28 10:18 J -24525536.18 -24525536.07 -24525535.95 0.0084 0.0045

Mercury -71861-12-25 11:45 J -24525448.13 -24525448.01 -24525447.88 0.0084 0.0034

Mercury -71860-03-23 13:11 J -24525360.08 -24525359.95 -24525359.81 0.0084 0.0023

Mercury -71860-06-19 14:37 J -24525272.02 -24525271.89 -24525271.75 0.0083 0.0012

Mercury -71860-09-15 16:04 J -24525183.97 -24525183.83 -24525183.69 0.0083 0.0002

Mercury -71860-12-12 17:30 J -24525095.91 -24525095.77 -24525095.63 0.0083 0.0009

Mercury -71859-03-10 18:57 J -24525007.85 -24525007.71 -24525007.58 0.0083 0.0019

Mercury -71859-06-06 20:09 J -24524919.78 -24524919.66 -24524919.53 0.0083 0.0030

Mercury -71859-09-02 21:35 J -24524831.72 -24524831.60 -24524831.48 0.0083 0.0040

Mercury -71859-11-29 22:47 J -24524743.65 -24524743.55 -24524743.43 0.0083 0.0051

Mercury -71858-02-26 00:13 J -24524655.58 -24524655.49 -24524655.39 0.0083 0.0061

Mercury -71858-05-25 01:25 J -24524567.50 -24524567.44 -24524567.36 0.0082 0.0071

Mercury -71858-08-21 02:52 J -24524479.40 -24524479.38 -24524479.35 0.0082 0.0081

Moon -71852-03-26 13:25 J -24522435.02 -24522434.94 -24522434.81 0.0079 0.0072

Earth -71852-03-26 13:54 J -24522435.01 -24522434.92 -24522434.83 0.0079 0.0074 \*

Venus -71851-08-30 03:21 J -24521913.51 -24521913.36 -24521913.19 0.0078 0.0052

Venus -71850-04-12 12:28 J -24521688.19 -24521687.98 -24521687.76 0.0078 0.0002

Venus -71850-11-23 20:52 J -24521462.77 -24521462.63 -24521462.46 0.0078 0.0054

Mercury -71707-09-28 18:13 J -24469287.79 -24469287.74 -24469287.66 0.0060 0.0056

Mercury -71707-12-25 19:25 J -24469199.77 -24469199.69 -24469199.58 0.0060 0.0051

Mercury -71706-03-23 20:23 J -24469111.74 -24469111.65 -24469111.51 0.0060 0.0047

Mercury -71706-06-19 22:18 J -24469023.71 -24469023.57 -24469023.44 0.0060 0.0041

Mercury -71706-09-15 23:16 J -24468935.67 -24468935.53 -24468935.37 0.0060 0.0036

Mercury -71706-12-13 00:13 J -24468847.63 -24468847.49 -24468847.31 0.0060 0.0031

Mercury -71705-03-10 01:25 J -24468759.59 -24468759.44 -24468759.25 0.0060 0.0026

Mercury -71705-06-06 03:06 J -24468671.54 -24468671.37 -24468671.19 0.0060 0.0020

Mercury -71705-09-02 04:18 J -24468583.49 -24468583.32 -24468583.13 0.0061 0.0014

Mercury -71705-11-29 05:45 J -24468495.45 -24468495.26 -24468495.08 0.0061 0.0009

Mercury -71704-02-25 06:57 J -24468407.39 -24468407.21 -24468407.02 0.0061 0.0003

Mercury -71704-05-24 08:09 J -24468319.34 -24468319.16 -24468318.97 0.0061 0.0003

Mercury -71704-08-20 09:21 J -24468231.29 -24468231.11 -24468230.92 0.0061 0.0008

Mercury -71704-11-16 10:47 J -24468143.23 -24468143.05 -24468142.87 0.0061 0.0013

Mercury -71703-02-12 11:45 J -24468055.17 -24468055.01 -24468054.82 0.0061 0.0019

Mercury -71703-05-11 13:11 J -24467967.11 -24467966.95 -24467966.77 0.0061 0.0024

Mercury -71703-08-07 14:23 J -24467879.05 -24467878.90 -24467878.72 0.0061 0.0030

Mercury -71703-11-03 16:04 J -24467790.98 -24467790.83 -24467790.68 0.0061 0.0036

Mercury -71702-01-30 17:01 J -24467702.91 -24467702.79 -24467702.64 0.0061 0.0042

Mercury -71702-04-28 18:13 J -24467614.84 -24467614.74 -24467614.60 0.0061 0.0047

Mercury -71702-07-25 19:54 J -24467526.75 -24467526.67 -24467526.57 0.0061 0.0053

Mercury -71702-10-21 21:06 J -24467438.66 -24467438.62 -24467438.55 0.0061 0.0059

Earth -71693-09-18 23:59 J -24464183.68 -24464183.50 -24464183.27 0.0064 0.0040

Moon -71693-09-19 01:40 J -24464183.63 -24464183.43 -24464183.20 0.0064 0.0039 \*

Earth -71692-09-20 13:11 J -24463817.10 -24463816.95 -24463816.78 0.0065 0.0051

Moon -71692-09-20 13:40 J -24463817.05 -24463816.93 -24463816.75 0.0065 0.0052 \*

Venus -71689-02-21 20:37 J -24462932.80 -24462932.64 -24462932.45 0.0066 0.0042

Mars -71689-09-16 15:06 J -24462725.17 -24462724.87 -24462724.53 0.0066 0.0028

Venus -71689-10-04 02:23 J -24462707.62 -24462707.40 -24462707.17 0.0066 0.0009

Venus -71688-05-17 07:54 J -24462482.38 -24462482.17 -24462481.96 0.0066 0.0025

Venus -71688-12-28 13:11 J -24462257.04 -24462256.95 -24462256.83 0.0066 0.0059

Mercury -71613-05-01 12:57 J -24435103.98 -24435103.96 -24435103.91 0.0084 0.0082

Mercury -71613-07-28 14:37 J -24435015.96 -24435015.89 -24435015.81 0.0084 0.0070

Mercury -71613-10-24 16:04 J -24434927.92 -24434927.83 -24434927.73 0.0084 0.0059

Mercury -71612-01-20 17:30 J -24434839.88 -24434839.77 -24434839.65 0.0084 0.0048

Mercury -71612-04-18 18:57 J -24434751.83 -24434751.71 -24434751.58 0.0084 0.0037

Mercury -71612-07-15 20:23 J -24434663.77 -24434663.65 -24434663.51 0.0084 0.0026

Mercury -71612-10-11 21:49 J -24434575.72 -24434575.59 -24434575.45 0.0084 0.0016

Mercury -71611-01-07 23:16 J -24434487.66 -24434487.53 -24434487.39 0.0083 0.0006

Mercury -71611-04-06 00:42 J -24434399.60 -24434399.47 -24434399.33 0.0083 0.0006

Mercury -71611-07-03 02:09 J -24434311.54 -24434311.41 -24434311.27 0.0083 0.0016

Mercury -71611-09-29 03:21 J -24434223.48 -24434223.36 -24434223.22 0.0083 0.0027

Mercury -71611-12-26 04:47 J -24434135.42 -24434135.30 -24434135.17 0.0083 0.0037

Mercury -71610-03-24 05:59 J -24434047.35 -24434047.25 -24434047.12 0.0083 0.0048

Mercury -71610-06-20 07:25 J -24433959.28 -24433959.19 -24433959.08 0.0083 0.0058

Mercury -71610-09-16 08:52 J -24433871.20 -24433871.13 -24433871.05 0.0083 0.0068

Mercury -71610-12-13 10:04 J -24433783.11 -24433783.08 -24433783.03 0.0082 0.0078

Moon -71604-03-27 08:37 J -24431852.38 -24431852.14 -24431851.87 0.0079 0.0023

Earth -71604-03-27 10:33 J -24431852.28 -24431852.06 -24431851.80 0.0079 0.0026 \*

Venus -71602-03-15 10:47 J -24431134.21 -24431134.05 -24431133.86 0.0078 0.0045

Venus -71602-10-26 19:54 J -24430908.88 -24430908.67 -24430908.45 0.0078 0.0008

Venus -71601-06-08 04:18 J -24430683.44 -24430683.32 -24430683.16 0.0078 0.0060

Mercury -71459-10-25 00:42 J -24378679.49 -24378679.47 -24378679.45 0.0060 0.0059

Mercury -71458-01-21 01:40 J -24378591.49 -24378591.43 -24378591.34 0.0060 0.0055

Mercury -71458-04-19 02:52 J -24378503.47 -24378503.38 -24378503.26 0.0060 0.0049

Mercury -71458-07-16 04:04 J -24378415.44 -24378415.33 -24378415.19 0.0060 0.0044

Mercury -71458-10-12 05:16 J -24378327.40 -24378327.28 -24378327.12 0.0060 0.0039

Mercury -71457-01-08 06:42 J -24378239.36 -24378239.22 -24378239.06 0.0060 0.0034

Mercury -71457-04-05 07:54 J -24378151.32 -24378151.17 -24378151.00 0.0060 0.0029

Mercury -71457-07-02 09:06 J -24378063.28 -24378063.12 -24378062.94 0.0060 0.0023

Mercury -71457-09-28 10:33 J -24377975.23 -24377975.06 -24377974.88 0.0060 0.0018

Mercury -71457-12-25 11:45 J -24377887.19 -24377887.01 -24377886.82 0.0061 0.0013

Mercury -71456-03-23 13:11 J -24377799.14 -24377798.95 -24377798.77 0.0061 0.0007

Mercury -71456-06-19 14:23 J -24377711.08 -24377710.90 -24377710.71 0.0061 0.0002

Mercury -71456-09-15 15:35 J -24377623.03 -24377622.85 -24377622.66 0.0061 0.0004  
 Mercury -71456-12-12 17:01 J -24377534.98 -24377534.79 -24377534.61 0.0061 0.0009  
 Mercury -71455-03-10 18:13 J -24377446.92 -24377446.74 -24377446.56 0.0061 0.0015  
 Mercury -71455-06-06 19:40 J -24377358.86 -24377358.68 -24377358.51 0.0061 0.0020  
 Mercury -71455-09-02 20:37 J -24377270.80 -24377270.64 -24377270.46 0.0061 0.0026  
 Mercury -71455-11-29 21:49 J -24377182.73 -24377182.59 -24377182.41 0.0061 0.0032  
 Mercury -71454-02-25 23:16 J -24377094.67 -24377094.53 -24377094.37 0.0061 0.0037  
 Mercury -71454-05-25 00:28 J -24377006.59 -24377006.48 -24377006.33 0.0061 0.0043  
 Mercury -71454-08-21 02:09 J -24376918.52 -24376918.41 -24376918.30 0.0061 0.0049  
 Mercury -71454-11-17 03:06 J -24376830.43 -24376830.37 -24376830.27 0.0061 0.0055  
 Mercury -71453-02-13 04:18 J -24376742.33 -24376742.32 -24376742.26 0.0061 0.0061  
 Earth -71445-09-20 08:09 J -24373600.32 -24373600.16 -24373599.97 0.0064 0.0048  
 Moon -71445-09-20 07:54 J -24373600.29 -24373600.17 -24373599.98 0.0064 0.0052 \*  
 Moon -71444-09-21 18:13 J -24373233.90 -24373233.74 -24373233.52 0.0065 0.0046  
 Earth -71444-09-21 20:23 J -24373233.81 -24373233.65 -24373233.42 0.0065 0.0043 \*  
 Venus -71441-01-25 00:42 J -24372378.51 -24372378.47 -24372378.42 0.0066 0.0064  
 Venus -71441-09-06 06:13 J -24372153.44 -24372153.24 -24372153.04 0.0066 0.0031  
 Mars -71441-12-24 15:06 J -24372044.22 -24372043.87 -24372043.51 0.0066 0.0002  
 Venus -71440-04-19 11:45 J -24371928.24 -24371928.01 -24371927.78 0.0066 0.0002  
 Venus -71440-11-30 17:16 J -24371702.97 -24371702.78 -24371702.59 0.0066 0.0036  
 Mercury -71365-08-23 21:35 J -24344407.64 -24344407.60 -24344407.53 0.0084 0.0078  
 Mercury -71365-11-19 23:16 J -24344319.61 -24344319.53 -24344319.44 0.0084 0.0066  
 Mercury -71364-02-16 00:42 J -24344231.57 -24344231.47 -24344231.36 0.0084 0.0055  
 Mercury -71364-05-15 02:09 J -24344143.52 -24344143.41 -24344143.28 0.0084 0.0044  
 Mercury -71364-08-11 03:49 J -24344055.47 -24344055.34 -24344055.21 0.0084 0.0033  
 Mercury -71364-11-07 05:01 J -24343967.41 -24343967.29 -24343967.15 0.0084 0.0023  
 Mercury -71363-02-03 06:42 J -24343879.36 -24343879.22 -24343879.08 0.0083 0.0011  
 Mercury -71363-05-02 08:09 J -24343791.30 -24343791.16 -24343791.02 0.0083 0.0001  
 Mercury -71363-07-29 09:21 J -24343703.24 -24343703.11 -24343702.97 0.0083 0.0011  
 Mercury -71363-10-25 10:47 J -24343615.18 -24343615.05 -24343614.91 0.0083 0.0020

Mercury -71362-01-21 11:59 J -24343527.12 -24343527.00 -24343526.86 0.0083 0.0031

Mercury -71362-04-19 13:25 J -24343439.05 -24343438.94 -24343438.81 0.0083 0.0041

Mercury -71362-07-16 14:52 J -24343350.98 -24343350.88 -24343350.77 0.0083 0.0051

Mercury -71362-10-12 16:04 J -24343262.91 -24343262.83 -24343262.73 0.0083 0.0062

Mercury -71361-01-08 17:16 J -24343174.83 -24343174.78 -24343174.70 0.0082 0.0072

Mercury -71361-04-05 18:42 J -24343086.73 -24343086.72 -24343086.69 0.0082 0.0081

Earth -71356-03-28 15:21 J -24341269.12 -24341268.86 -24341268.61 0.0080 0.0001

Moon -71356-03-28 17:59 J -24341268.99 -24341268.75 -24341268.49 0.0080 0.0004 \*

Venus -71354-09-28 22:47 J -24340354.75 -24340354.55 -24340354.34 0.0078 0.0026

Venus -71353-05-11 07:25 J -24340129.38 -24340129.19 -24340128.97 0.0078 0.0027

Mercury -71210-02-16 08:09 J -24287983.20 -24287983.16 -24287983.07 0.0060 0.0056

Mercury -71210-05-15 09:21 J -24287895.18 -24287895.11 -24287894.99 0.0060 0.0051

Mercury -71210-08-11 11:01 J -24287807.15 -24287807.04 -24287806.91 0.0060 0.0046

Mercury -71210-11-07 12:13 J -24287719.12 -24287718.99 -24287718.85 0.0060 0.0040

Mercury -71209-02-03 13:11 J -24287631.08 -24287630.95 -24287630.78 0.0060 0.0036

Mercury -71209-05-01 14:23 J -24287543.04 -24287542.90 -24287542.72 0.0060 0.0031

Mercury -71209-07-28 16:04 J -24287455.00 -24287454.83 -24287454.66 0.0060 0.0025

Mercury -71209-10-24 17:01 J -24287366.95 -24287366.79 -24287366.60 0.0061 0.0020

Mercury -71208-01-20 18:42 J -24287278.90 -24287278.72 -24287278.54 0.0061 0.0014

Mercury -71208-04-18 19:54 J -24287190.85 -24287190.67 -24287190.49 0.0061 0.0009

Mercury -71208-07-15 21:06 J -24287102.80 -24287102.62 -24287102.43 0.0061 0.0003

Mercury -71208-10-11 22:18 J -24287014.75 -24287014.57 -24287014.38 0.0061 0.0003

Mercury -71207-01-07 23:30 J -24286926.69 -24286926.52 -24286926.33 0.0061 0.0008

Mercury -71207-04-06 00:57 J -24286838.64 -24286838.46 -24286838.27 0.0061 0.0013

Mercury -71207-07-03 02:09 J -24286750.58 -24286750.41 -24286750.23 0.0061 0.0019

Mercury -71207-09-29 03:35 J -24286662.52 -24286662.35 -24286662.18 0.0061 0.0024

Mercury -71207-12-26 04:33 J -24286574.45 -24286574.31 -24286574.13 0.0061 0.0030

Mercury -71206-03-24 05:59 J -24286486.39 -24286486.25 -24286486.09 0.0061 0.0036

Mercury -71206-06-20 07:11 J -24286398.32 -24286398.20 -24286398.05 0.0061 0.0042

Mercury -71206-09-16 08:23 J -24286310.25 -24286310.15 -24286310.01 0.0061 0.0047



Mercury -71206-12-13 10:04 J -24286222.16 -24286222.08 -24286221.98 0.0061 0.0053

Mercury -71205-03-10 11:01 J -24286134.07 -24286134.04 -24286133.96 0.0061 0.0059

Moon -71197-09-21 17:01 J -24283016.93 -24283016.79 -24283016.59 0.0064 0.0050

Earth -71197-09-21 18:28 J -24283016.88 -24283016.73 -24283016.53 0.0064 0.0049 \*

Earth -71196-09-23 06:57 J -24282650.38 -24282650.21 -24282649.98 0.0065 0.0042

Moon -71196-09-23 09:35 J -24282650.26 -24282650.10 -24282649.88 0.0065 0.0043 \*

Venus -71193-08-09 11:59 J -24281599.14 -24281599.00 -24281598.85 0.0066 0.0049

Venus -71192-03-22 17:16 J -24281373.99 -24281373.78 -24281373.55 0.0066 0.0016

Mars -71192-04-02 21:49 J -24281362.84 -24281362.59 -24281362.27 0.0066 0.0039

Venus -71192-11-02 23:01 J -24281148.76 -24281148.54 -24281148.32 0.0066 0.0018

Venus -71191-06-16 04:33 J -24280923.44 -24280923.31 -24280923.16 0.0067 0.0052

Mercury -71117-09-19 06:13 J -24253799.28 -24253799.24 -24253799.18 0.0084 0.0078

Mercury -71117-12-16 07:40 J -24253711.25 -24253711.18 -24253711.09 0.0084 0.0067

Mercury -71116-03-14 09:06 J -24253623.21 -24253623.12 -24253623.01 0.0084 0.0056

Mercury -71116-06-10 10:47 J -24253535.16 -24253535.05 -24253534.93 0.0084 0.0045

Mercury -71116-09-06 12:13 J -24253447.11 -24253446.99 -24253446.86 0.0084 0.0034

Mercury -71116-12-03 13:40 J -24253359.06 -24253358.93 -24253358.79 0.0084 0.0023

Mercury -71115-03-01 15:06 J -24253271.00 -24253270.87 -24253270.73 0.0084 0.0013

Mercury -71115-05-28 16:33 J -24253182.95 -24253182.81 -24253182.67 0.0083 0.0002

Mercury -71115-08-24 17:59 J -24253094.89 -24253094.75 -24253094.61 0.0083 0.0009

Mercury -71115-11-20 19:25 J -24253006.83 -24253006.69 -24253006.56 0.0083 0.0019

Mercury -71114-02-16 20:37 J -24252918.76 -24252918.64 -24252918.51 0.0083 0.0030

Mercury -71114-05-15 22:04 J -24252830.70 -24252830.58 -24252830.46 0.0083 0.0040

Mercury -71114-08-11 23:30 J -24252742.63 -24252742.52 -24252742.41 0.0083 0.0050

Mercury -71114-11-08 00:57 J -24252654.56 -24252654.46 -24252654.37 0.0083 0.0060

Mercury -71113-02-04 01:54 J -24252566.48 -24252566.42 -24252566.34 0.0082 0.0070

Mercury -71113-05-02 03:06 J -24252478.38 -24252478.37 -24252478.32 0.0082 0.0081

Moon -71108-03-29 21:49 J -24250685.84 -24250685.59 -24250685.32 0.0080 0.0004

Earth -71108-03-30 01:11 J -24250685.70 -24250685.45 -24250685.19 0.0080 0.0002 \*

Venus -71106-09-01 04:47 J -24249800.45 -24249800.30 -24249800.12 0.0078 0.0049

Venus -71105-04-13 13:54 J -24249575.13 -24249574.92 -24249574.70 0.0078 0.0005

Venus -71105-11-24 22:18 J -24249349.70 -24249349.57 -24249349.41 0.0078 0.0057

# 71ST MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 71st millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-70963-12-16 15:21 J	-24197462.87	-24197462.86	-24197462.82	0.0060	0.0059		
Mercury	-70962-03-14 16:33 J	-24197374.87	-24197374.81	-24197374.72	0.0060	0.0054		
Mercury	-70962-06-10 17:30 J	-24197286.85	-24197286.77	-24197286.64	0.0060	0.0050		
Mercury	-70962-09-06 18:42 J	-24197198.82	-24197198.72	-24197198.57	0.0060	0.0045		
Mercury	-70962-12-03 20:23 J	-24197110.78	-24197110.65	-24197110.50	0.0060	0.0039		
Mercury	-70961-02-29 21:35 J	-24197022.74	-24197022.60	-24197022.44	0.0060	0.0034		
Mercury	-70961-05-27 22:47 J	-24196934.70	-24196934.55	-24196934.38	0.0060	0.0028		
Mercury	-70961-08-24 00:13 J	-24196846.66	-24196846.49	-24196846.32	0.0060	0.0023		
Mercury	-70961-11-20 01:25 J	-24196758.61	-24196758.44	-24196758.26	0.0061	0.0018		
Mercury	-70960-02-16 02:37 J	-24196670.56	-24196670.39	-24196670.20	0.0061	0.0013		
Mercury	-70960-05-15 04:04 J	-24196582.51	-24196582.33	-24196582.14	0.0061	0.0007		
Mercury	-70960-08-11 05:16 J	-24196494.46	-24196494.28	-24196494.09	0.0061	0.0002		
Mercury	-70960-11-07 06:42 J	-24196406.41	-24196406.22	-24196406.04	0.0061	0.0004		
Mercury	-70959-02-03 07:40 J	-24196318.35	-24196318.18	-24196317.98	0.0061	0.0010		
Mercury	-70959-05-02 09:06 J	-24196230.29	-24196230.12	-24196229.93	0.0061	0.0015		
Mercury	-70959-07-29 10:33 J	-24196142.23	-24196142.06	-24196141.88	0.0061	0.0020		

Mercury -70959-10-25 11:30 J -24196054.17 -24196054.02 -24196053.84 0.0061 0.0026

Mercury -70958-01-21 13:11 J -24195966.11 -24195965.95 -24195965.79 0.0061 0.0032

Mercury -70958-04-19 14:09 J -24195878.04 -24195877.91 -24195877.75 0.0061 0.0038

Mercury -70958-07-16 15:21 J -24195789.97 -24195789.86 -24195789.71 0.0061 0.0043

Mercury -70958-10-12 16:47 J -24195701.90 -24195701.80 -24195701.67 0.0061 0.0049

Mercury -70957-01-08 17:59 J -24195613.81 -24195613.75 -24195613.64 0.0061 0.0055

Mercury -70957-04-05 19:11 J -24195525.71 -24195525.70 -24195525.63 0.0062 0.0061

Earth -70949-09-23 10:04 J -24192433.29 -24192433.08 -24192432.85 0.0064 0.0036

Moon -70949-09-23 11:45 J -24192433.21 -24192433.01 -24192432.78 0.0064 0.0034 \*

Moon -70948-09-24 19:25 J -24192066.84 -24192066.69 -24192066.52 0.0065 0.0051

Earth -70948-09-24 22:18 J -24192066.67 -24192066.57 -24192066.40 0.0065 0.0055 \*

Venus -70945-07-12 20:23 J -24191044.72 -24191044.65 -24191044.52 0.0066 0.0059

Venus -70944-02-23 02:23 J -24190819.61 -24190819.40 -24190819.19 0.0066 0.0025

Venus -70944-10-06 07:54 J -24190594.39 -24190594.17 -24190593.94 0.0066 0.0008

Venus -70943-05-19 13:11 J -24190369.11 -24190368.95 -24190368.76 0.0067 0.0043

Mercury -70869-07-19 14:23 J -24163278.90 -24163278.90 -24163278.89 0.0084 0.0084

Mercury -70869-10-15 15:49 J -24163190.90 -24163190.84 -24163190.76 0.0084 0.0073

Mercury -70868-01-11 17:16 J -24163102.86 -24163102.78 -24163102.68 0.0084 0.0062

Mercury -70868-04-09 18:42 J -24163014.82 -24163014.72 -24163014.60 0.0084 0.0051

Mercury -70868-07-06 20:23 J -24162926.77 -24162926.65 -24162926.53 0.0084 0.0040

Mercury -70868-10-02 21:35 J -24162838.72 -24162838.60 -24162838.46 0.0084 0.0030

Mercury -70868-12-29 23:16 J -24162750.66 -24162750.53 -24162750.39 0.0084 0.0019

Mercury -70867-03-28 00:42 J -24162662.61 -24162662.47 -24162662.33 0.0083 0.0008

Mercury -70867-06-24 02:09 J -24162574.55 -24162574.41 -24162574.27 0.0083 0.0003

Mercury -70867-09-20 03:35 J -24162486.49 -24162486.35 -24162486.22 0.0083 0.0013

Mercury -70867-12-17 04:47 J -24162398.43 -24162398.30 -24162398.16 0.0083 0.0024

Mercury -70866-03-15 06:13 J -24162310.36 -24162310.24 -24162310.11 0.0083 0.0034

Mercury -70866-06-11 07:40 J -24162222.29 -24162222.18 -24162222.06 0.0083 0.0044

Mercury -70866-09-07 08:52 J -24162134.22 -24162134.13 -24162134.02 0.0083 0.0054

Mercury -70866-12-04 10:04 J -24162046.15 -24162046.08 -24162045.98 0.0083 0.0065

Mercury -70865-03-01 11:30 J -24161958.07 -24161958.02 -24161957.95 0.0082 0.0074

Earth -70860-03-31 16:47 J -24160102.05 -24160101.80 -24160101.55 0.0080 0.0018

Moon -70860-03-31 20:09 J -24160101.90 -24160101.66 -24160101.40 0.0080 0.0018 \*

Saturn -70859-04-16 10:33 J -24159721.63 -24159721.06 -24159720.42 0.0079 0.0028

Venus -70858-08-04 14:09 J -24159246.02 -24159245.91 -24159245.75 0.0078 0.0061

Venus -70857-03-16 23:30 J -24159020.73 -24159020.52 -24159020.30 0.0078 0.0007

Venus -70857-10-28 07:54 J -24158795.33 -24158795.17 -24158794.98 0.0078 0.0046

Mercury -70714-01-11 23:45 J -24106854.55 -24106854.51 -24106854.41 0.0060 0.0056

Mercury -70714-04-10 01:25 J -24106766.53 -24106766.44 -24106766.33 0.0060 0.0051

Mercury -70714-07-07 02:37 J -24106678.50 -24106678.39 -24106678.26 0.0060 0.0046

Mercury -70714-10-03 03:49 J -24106590.46 -24106590.34 -24106590.19 0.0060 0.0040

Mercury -70714-12-30 04:47 J -24106502.43 -24106502.30 -24106502.13 0.0060 0.0036

Mercury -70713-03-27 06:28 J -24106414.39 -24106414.23 -24106414.07 0.0060 0.0030

Mercury -70713-06-23 07:40 J -24106326.34 -24106326.18 -24106326.01 0.0061 0.0025

Mercury -70713-09-19 08:52 J -24106238.30 -24106238.13 -24106237.95 0.0061 0.0019

Mercury -70713-12-16 10:18 J -24106150.25 -24106150.07 -24106149.89 0.0061 0.0014

Mercury -70712-03-14 11:30 J -24106062.20 -24106062.02 -24106061.83 0.0061 0.0009

Mercury -70712-06-10 12:42 J -24105974.15 -24105973.97 -24105973.78 0.0061 0.0004

Mercury -70712-09-06 14:09 J -24105886.10 -24105885.91 -24105885.72 0.0061 0.0002

Mercury -70712-12-03 15:21 J -24105798.04 -24105797.86 -24105797.67 0.0061 0.0008

Mercury -70711-03-01 16:33 J -24105709.98 -24105709.81 -24105709.62 0.0061 0.0013

Mercury -70711-05-28 17:45 J -24105621.93 -24105621.76 -24105621.57 0.0061 0.0019

Mercury -70711-08-24 19:11 J -24105533.86 -24105533.70 -24105533.52 0.0061 0.0024

Mercury -70711-11-20 20:09 J -24105445.80 -24105445.66 -24105445.48 0.0061 0.0031

Mercury -70710-02-16 21:35 J -24105357.73 -24105357.60 -24105357.43 0.0061 0.0036

Mercury -70710-05-15 22:47 J -24105269.67 -24105269.55 -24105269.39 0.0061 0.0042

Mercury -70710-08-12 00:28 J -24105181.59 -24105181.48 -24105181.35 0.0061 0.0047

Mercury -70710-11-08 01:25 J -24105093.51 -24105093.44 -24105093.32 0.0061 0.0053

Mercury -70709-02-04 02:37 J -24105005.42 -24105005.39 -24105005.30 0.0062 0.0059

Moon -70701-09-25 00:57 J -24101849.72 -24101849.46 -24101849.20 0.0064 0.0013

Earth -70701-09-25 03:35 J -24101849.59 -24101849.35 -24101849.08 0.0064 0.0016 \*  
 Venus -70697-06-15 06:57 J -24100490.24 -24100490.21 -24100490.13 0.0066 0.0064  
 Venus -70696-01-26 12:57 J -24100265.15 -24100264.96 -24100264.75 0.0066 0.0030  
 Venus -70696-09-08 18:42 J -24100039.95 -24100039.72 -24100039.49 0.0066 0.0004  
 Venus -70695-04-22 00:13 J -24099814.67 -24099814.49 -24099814.30 0.0067 0.0038  
 Mercury -70621-08-15 01:11 J -24072670.51 -24072670.45 -24072670.38 0.0084 0.0074  
 Mercury -70621-11-11 02:52 J -24072582.47 -24072582.38 -24072582.29 0.0084 0.0062  
 Mercury -70620-02-07 04:18 J -24072494.43 -24072494.32 -24072494.21 0.0084 0.0051  
 Mercury -70620-05-06 05:30 J -24072406.38 -24072406.27 -24072406.14 0.0084 0.0041  
 Mercury -70620-08-02 07:11 J -24072318.33 -24072318.20 -24072318.07 0.0084 0.0030  
 Mercury -70620-10-29 08:37 J -24072230.27 -24072230.14 -24072230.00 0.0084 0.0019  
 Mercury -70619-01-25 10:04 J -24072142.22 -24072142.08 -24072141.94 0.0083 0.0008  
 Mercury -70619-04-23 11:30 J -24072054.16 -24072054.02 -24072053.88 0.0083 0.0002  
 Mercury -70619-07-20 12:57 J -24071966.10 -24071965.96 -24071965.82 0.0083 0.0013  
 Mercury -70619-10-16 14:09 J -24071878.04 -24071877.91 -24071877.77 0.0083 0.0023  
 Mercury -70618-01-12 15:35 J -24071789.97 -24071789.85 -24071789.72 0.0083 0.0033  
 Mercury -70618-04-10 16:47 J -24071701.90 -24071701.80 -24071701.67 0.0083 0.0044  
 Mercury -70618-07-07 18:13 J -24071613.84 -24071613.74 -24071613.63 0.0083 0.0054  
 Mercury -70618-10-03 19:40 J -24071525.76 -24071525.68 -24071525.59 0.0083 0.0064  
 Mercury -70618-12-30 20:52 J -24071437.68 -24071437.63 -24071437.56 0.0082 0.0074  
 Moon -70612-04-02 10:18 J -24069518.23 -24069518.07 -24069517.86 0.0079 0.0055  
 Earth -70612-04-02 13:40 J -24069518.08 -24069517.93 -24069517.73 0.0079 0.0059 \*  
 Mars -70610-05-30 19:54 J -24068729.95 -24068729.67 -24068729.39 0.0078 0.0015  
 Venus -70610-07-08 02:52 J -24068691.49 -24068691.38 -24068691.22 0.0078 0.0061  
 Venus -70609-02-18 12:28 J -24068466.19 -24068465.98 -24068465.76 0.0078 0.0007  
 Venus -70609-09-30 20:52 J -24068240.79 -24068240.63 -24068240.44 0.0078 0.0046  
 Mercury -70467-08-15 07:40 J -24016422.19 -24016422.18 -24016422.14 0.0060 0.0059  
 Mercury -70467-11-11 08:52 J -24016334.19 -24016334.13 -24016334.04 0.0060 0.0054  
 Mercury -70466-02-07 09:49 J -24016246.17 -24016246.09 -24016245.96 0.0060 0.0050  
 Mercury -70466-05-06 11:01 J -24016158.14 -24016158.04 -24016157.89 0.0060 0.0045

Mercury -70466-08-02 12:13 J -24016070.11 -24016069.99 -24016069.83 0.0060 0.0040

Mercury -70466-10-29 13:54 J -24015982.07 -24015981.92 -24015981.76 0.0060 0.0034

Mercury -70465-01-25 14:52 J -24015894.03 -24015893.88 -24015893.70 0.0060 0.0029

Mercury -70465-04-22 16:04 J -24015805.98 -24015805.83 -24015805.64 0.0061 0.0024

Mercury -70465-07-19 17:45 J -24015717.94 -24015717.76 -24015717.58 0.0061 0.0018

Mercury -70465-10-15 18:57 J -24015629.89 -24015629.71 -24015629.53 0.0061 0.0013

Mercury -70464-01-11 20:09 J -24015541.84 -24015541.66 -24015541.47 0.0061 0.0008

Mercury -70464-04-09 21:35 J -24015453.79 -24015453.60 -24015453.42 0.0061 0.0002

Mercury -70464-07-06 22:47 J -24015365.73 -24015365.55 -24015365.36 0.0061 0.0004

Mercury -70464-10-02 23:59 J -24015277.68 -24015277.50 -24015277.31 0.0061 0.0009

Mercury -70464-12-30 01:25 J -24015189.62 -24015189.44 -24015189.26 0.0061 0.0014

Mercury -70463-03-28 02:23 J -24015101.56 -24015101.40 -24015101.21 0.0061 0.0021

Mercury -70463-06-24 04:04 J -24015013.50 -24015013.33 -24015013.16 0.0061 0.0026

Mercury -70463-09-20 05:01 J -24014925.43 -24014925.29 -24014925.12 0.0061 0.0031

Mercury -70463-12-17 06:42 J -24014837.37 -24014837.22 -24014837.07 0.0061 0.0037

Mercury -70462-03-15 07:40 J -24014749.30 -24014749.18 -24014749.03 0.0061 0.0043

Mercury -70462-06-11 08:52 J -24014661.22 -24014661.13 -24014660.99 0.0061 0.0049

Mercury -70462-09-07 10:33 J -24014573.14 -24014573.06 -24014572.96 0.0062 0.0054

Mercury -70462-12-04 11:30 J -24014485.04 -24014485.02 -24014484.95 0.0062 0.0060

Earth -70453-09-27 01:25 J -24011265.67 -24011265.44 -24011265.17 0.0065 0.0018

Moon -70453-09-27 04:47 J -24011265.54 -24011265.30 -24011265.05 0.0065 0.0017 \*

Mars -70449-03-06 10:18 J -24010009.38 -24010009.07 -24010008.72 0.0066 0.0025

Venus -70449-05-18 20:37 J -24009935.71 -24009935.64 -24009935.54 0.0066 0.0061

Venus -70449-12-30 01:54 J -24009710.60 -24009710.42 -24009710.19 0.0066 0.0029

Venus -70448-08-12 08:09 J -24009485.38 -24009485.16 -24009484.93 0.0066 0.0006

Venus -70447-03-25 13:40 J -24009260.10 -24009259.93 -24009259.74 0.0067 0.0041

Mercury -70373-03-18 09:49 J -23982238.12 -23982238.09 -23982238.05 0.0084 0.0081

Mercury -70373-06-14 11:30 J -23982150.10 -23982150.02 -23982149.95 0.0084 0.0070

Mercury -70373-09-10 12:42 J -23982062.06 -23982061.97 -23982061.86 0.0084 0.0059

Mercury -70373-12-07 14:09 J -23981974.01 -23981973.91 -23981973.78 0.0084 0.0048

Mercury -70372-03-05 15:49 J -23981885.96 -23981885.84 -23981885.71 0.0084 0.0037  
 Mercury -70372-06-01 17:16 J -23981797.91 -23981797.78 -23981797.64 0.0084 0.0026  
 Mercury -70372-08-28 18:42 J -23981709.85 -23981709.72 -23981709.58 0.0084 0.0016  
 Mercury -70372-11-24 20:09 J -23981621.80 -23981621.66 -23981621.52 0.0083 0.0005  
 Mercury -70371-02-20 21:35 J -23981533.74 -23981533.60 -23981533.46 0.0083 0.0006  
 Mercury -70371-05-19 23:01 J -23981445.68 -23981445.54 -23981445.40 0.0083 0.0016  
 Mercury -70371-08-16 00:28 J -23981357.61 -23981357.48 -23981357.35 0.0083 0.0026  
 Mercury -70371-11-12 01:40 J -23981269.55 -23981269.43 -23981269.30 0.0083 0.0037  
 Mercury -70370-02-08 03:06 J -23981181.48 -23981181.37 -23981181.25 0.0083 0.0047  
 Mercury -70370-05-07 04:18 J -23981093.41 -23981093.32 -23981093.21 0.0083 0.0057  
 Mercury -70370-08-03 05:45 J -23981005.33 -23981005.26 -23981005.18 0.0082 0.0067  
 Mercury -70370-10-30 07:11 J -23980917.25 -23980917.20 -23980917.15 0.0082 0.0077  
 Moon -70365-04-02 08:23 J -23979301.34 -23979301.15 -23979300.94 0.0080 0.0051  
 Earth -70365-04-02 11:45 J -23979301.18 -23979301.01 -23979300.81 0.0080 0.0054 \*  
 Venus -70362-06-10 18:13 J -23978136.89 -23978136.74 -23978136.57 0.0078 0.0052  
 Venus -70361-01-22 03:35 J -23977911.56 -23977911.35 -23977911.13 0.0078 0.0001  
 Venus -70361-09-03 11:59 J -23977686.14 -23977686.00 -23977685.83 0.0077 0.0053  
 Mercury -70219-06-14 17:01 J -23925901.84 -23925901.79 -23925901.72 0.0060 0.0057  
 Mercury -70219-09-10 18:13 J -23925813.82 -23925813.74 -23925813.63 0.0060 0.0051  
 Mercury -70219-12-07 19:11 J -23925725.79 -23925725.70 -23925725.56 0.0060 0.0047  
 Mercury -70218-03-05 20:23 J -23925637.76 -23925637.65 -23925637.49 0.0060 0.0042  
 Mercury -70218-06-01 22:04 J -23925549.72 -23925549.58 -23925549.43 0.0060 0.0036  
 Mercury -70218-08-28 23:16 J -23925461.68 -23925461.53 -23925461.37 0.0061 0.0031  
 Mercury -70218-11-25 00:13 J -23925373.64 -23925373.49 -23925373.31 0.0061 0.0026  
 Mercury -70217-02-21 01:25 J -23925285.59 -23925285.44 -23925285.25 0.0061 0.0021  
 Mercury -70217-05-19 03:06 J -23925197.55 -23925197.37 -23925197.19 0.0061 0.0015  
 Mercury -70217-08-15 04:18 J -23925109.50 -23925109.32 -23925109.13 0.0061 0.0010  
 Mercury -70217-11-11 05:45 J -23925021.45 -23925021.26 -23925021.08 0.0061 0.0004  
 Mercury -70216-02-07 06:57 J -23924933.39 -23924933.21 -23924933.02 0.0061 0.0001  
 Mercury -70216-05-06 08:09 J -23924845.34 -23924845.16 -23924844.97 0.0061 0.0007

Mercury -70216-08-02 09:21 J -23924757.28 -23924757.11 -23924756.92 0.0061 0.0012

Mercury -70216-10-29 10:33 J -23924669.22 -23924669.06 -23924668.87 0.0061 0.0018

Mercury -70215-01-25 11:59 J -23924581.16 -23924581.00 -23924580.82 0.0061 0.0023

Mercury -70215-04-23 13:25 J -23924493.10 -23924492.94 -23924492.78 0.0061 0.0029

Mercury -70215-07-20 14:23 J -23924405.04 -23924404.90 -23924404.73 0.0061 0.0035

Mercury -70215-10-16 15:35 J -23924316.97 -23924316.85 -23924316.69 0.0061 0.0041

Mercury -70214-01-12 17:01 J -23924228.90 -23924228.79 -23924228.65 0.0061 0.0046

Mercury -70214-04-10 18:13 J -23924140.82 -23924140.74 -23924140.62 0.0062 0.0052

Mercury -70214-07-07 19:54 J -23924052.73 -23924052.67 -23924052.59 0.0062 0.0057

Earth -70206-09-28 13:11 J -23921048.16 -23921047.95 -23921047.71 0.0064 0.0033

Moon -70206-09-28 15:21 J -23921048.07 -23921047.86 -23921047.62 0.0064 0.0030 \*

Moon -70205-09-28 22:04 J -23920681.70 -23920681.58 -23920681.41 0.0065 0.0054

Earth -70205-09-29 01:25 J -23920681.52 -23920681.44 -23920681.28 0.0065 0.0058 \*

Venus -70201-04-21 11:16 J -23919381.13 -23919381.03 -23919380.87 0.0066 0.0054

Venus -70201-12-02 17:16 J -23919155.98 -23919155.78 -23919155.55 0.0066 0.0020

Venus -70200-07-15 23:16 J -23918930.74 -23918930.53 -23918930.30 0.0067 0.0014

Venus -70199-02-26 05:01 J -23918705.43 -23918705.29 -23918705.13 0.0067 0.0049

Mercury -70126-10-20 19:25 J -23891805.71 -23891805.69 -23891805.65 0.0084 0.0082

Mercury -70125-01-16 20:52 J -23891717.69 -23891717.63 -23891717.54 0.0084 0.0071

Mercury -70125-04-13 22:33 J -23891629.65 -23891629.56 -23891629.46 0.0084 0.0060

Mercury -70125-07-10 23:59 J -23891541.60 -23891541.50 -23891541.38 0.0084 0.0049

Mercury -70125-10-07 01:40 J -23891453.55 -23891453.43 -23891453.31 0.0084 0.0038

Mercury -70124-01-03 03:06 J -23891365.50 -23891365.37 -23891365.24 0.0084 0.0027

Mercury -70124-04-01 04:33 J -23891277.44 -23891277.31 -23891277.17 0.0084 0.0017

Mercury -70124-06-28 05:59 J -23891189.39 -23891189.25 -23891189.11 0.0083 0.0006

Mercury -70124-09-24 07:25 J -23891101.33 -23891101.19 -23891101.05 0.0083 0.0004

Mercury -70124-12-21 08:52 J -23891013.26 -23891013.13 -23891012.99 0.0083 0.0015

Mercury -70123-03-19 10:18 J -23890925.20 -23890925.07 -23890924.94 0.0083 0.0025

Mercury -70123-06-15 11:45 J -23890837.14 -23890837.01 -23890836.89 0.0083 0.0035

Mercury -70123-09-11 12:42 J -23890749.07 -23890748.97 -23890748.84 0.0083 0.0046



Mercury -70123-12-08 14:09 J -23890661.00 -23890660.91 -23890660.80 0.0083 0.0056

Mercury -70122-03-06 15:35 J -23890572.92 -23890572.85 -23890572.76 0.0083 0.0066

Mercury -70122-06-02 16:47 J -23890484.84 -23890484.80 -23890484.73 0.0082 0.0076

Earth -70117-04-04 19:40 J -23888716.92 -23888716.68 -23888716.43 0.0080 0.0024

Moon -70117-04-04 23:16 J -23888716.77 -23888716.53 -23888716.27 0.0080 0.0022 \*

Venus -70114-05-14 12:57 J -23887582.14 -23887581.96 -23887581.75 0.0078 0.0033

Venus -70114-12-25 22:04 J -23887356.78 -23887356.58 -23887356.37 0.0078 0.0020

Venus -70113-08-07 06:28 J -23887131.29 -23887131.23 -23887131.13 0.0077 0.0072

# 70TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 70th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-69971-01-16 02:23 J	-23835469.46	-23835469.40	-23835469.32	0.0060	0.0056		
Mercury	-69971-04-14 03:35 J	-23835381.44	-23835381.35	-23835381.24	0.0060	0.0051		
Mercury	-69971-07-11 04:33 J	-23835293.41	-23835293.31	-23835293.17	0.0060	0.0046		
Mercury	-69971-10-07 05:45 J	-23835205.37	-23835205.26	-23835205.10	0.0060	0.0041		
Mercury	-69970-01-03 07:25 J	-23835117.34	-23835117.19	-23835117.04	0.0060	0.0035		
Mercury	-69970-04-01 08:37 J	-23835029.30	-23835029.14	-23835028.98	0.0061	0.0030		
Mercury	-69970-06-28 09:35 J	-23834941.25	-23834941.10	-23834940.92	0.0061	0.0025		
Mercury	-69970-09-24 10:47 J	-23834853.21	-23834853.05	-23834852.86	0.0061	0.0020		
Mercury	-69970-12-21 12:28 J	-23834765.16	-23834764.98	-23834764.80	0.0061	0.0014		
Mercury	-69969-03-18 13:40 J	-23834677.11	-23834676.93	-23834676.75	0.0061	0.0009		
Mercury	-69969-06-14 14:52 J	-23834589.06	-23834588.88	-23834588.69	0.0061	0.0004		

Mercury -69969-09-10 16:18 J -23834501.01 -23834500.82 -23834500.64 0.0061 0.0002

Mercury -69969-12-07 17:16 J -23834412.95 -23834412.78 -23834412.59 0.0061 0.0008

Mercury -69968-03-05 18:42 J -23834324.90 -23834324.72 -23834324.54 0.0061 0.0013

Mercury -69968-06-01 20:09 J -23834236.84 -23834236.66 -23834236.49 0.0061 0.0019

Mercury -69968-08-28 21:06 J -23834148.78 -23834148.62 -23834148.44 0.0061 0.0024

Mercury -69968-11-24 22:33 J -23834060.71 -23834060.56 -23834060.39 0.0061 0.0030

Mercury -69967-02-20 23:45 J -23833972.65 -23833972.51 -23833972.35 0.0061 0.0035

Mercury -69967-05-20 01:11 J -23833884.58 -23833884.45 -23833884.30 0.0061 0.0041

Mercury -69967-08-16 02:23 J -23833796.51 -23833796.40 -23833796.27 0.0061 0.0047

Mercury -69967-11-12 03:21 J -23833708.43 -23833708.36 -23833708.23 0.0062 0.0053

Mercury -69966-02-08 05:01 J -23833620.34 -23833620.29 -23833620.21 0.0062 0.0058

Moon -69958-09-30 15:06 J -23830464.11 -23830463.87 -23830463.60 0.0065 0.0022

Earth -69958-09-30 18:13 J -23830463.98 -23830463.74 -23830463.48 0.0065 0.0020 \*

Venus -69953-03-25 05:30 J -23828826.43 -23828826.27 -23828826.06 0.0066 0.0040

Venus -69953-11-05 11:45 J -23828601.24 -23828601.01 -23828600.78 0.0067 0.0005

Venus -69952-06-18 17:16 J -23828375.97 -23828375.78 -23828375.57 0.0067 0.0030

Venus -69951-01-29 23:01 J -23828150.57 -23828150.54 -23828150.47 0.0067 0.0065

Mercury -69878-05-24 06:13 J -23801373.28 -23801373.24 -23801373.19 0.0084 0.0079

Mercury -69878-08-20 07:40 J -23801285.25 -23801285.18 -23801285.09 0.0084 0.0068

Mercury -69878-11-16 09:21 J -23801197.21 -23801197.11 -23801197.01 0.0084 0.0057

Mercury -69877-02-12 10:33 J -23801109.16 -23801109.06 -23801108.93 0.0084 0.0047

Mercury -69877-05-10 12:13 J -23801021.11 -23801020.99 -23801020.86 0.0084 0.0036

Mercury -69877-08-06 13:40 J -23800933.06 -23800932.93 -23800932.79 0.0084 0.0025

Mercury -69877-11-02 15:06 J -23800845.00 -23800844.87 -23800844.73 0.0084 0.0015

Mercury -69876-01-29 16:33 J -23800756.94 -23800756.81 -23800756.67 0.0083 0.0004

Mercury -69876-04-27 17:59 J -23800668.88 -23800668.75 -23800668.61 0.0083 0.0007

Mercury -69876-07-24 19:25 J -23800580.82 -23800580.69 -23800580.55 0.0083 0.0017

Mercury -69876-10-20 20:52 J -23800492.76 -23800492.63 -23800492.50 0.0083 0.0027

Mercury -69875-01-16 22:18 J -23800404.69 -23800404.57 -23800404.45 0.0083 0.0037

Mercury -69875-04-14 23:30 J -23800316.63 -23800316.52 -23800316.40 0.0083 0.0048

Mercury -69875-07-12 00:42 J -23800228.55 -23800228.47 -23800228.36 0.0083 0.0058

Mercury -69875-10-08 02:09 J -23800140.48 -23800140.41 -23800140.32 0.0082 0.0068

Mercury -69874-01-04 03:21 J -23800052.39 -23800052.36 -23800052.30 0.0082 0.0078

Earth -69870-04-06 03:06 J -23798499.54 -23798499.37 -23798499.16 0.0080 0.0053

Moon -69870-04-06 06:28 J -23798499.41 -23798499.23 -23798499.01 0.0080 0.0049 \*

Mars -69867-05-08 08:09 J -23797371.37 -23797371.16 -23797370.90 0.0078 0.0044

Venus -69867-09-04 00:57 J -23797252.59 -23797252.46 -23797252.32 0.0078 0.0060

Venus -69866-04-17 09:49 J -23797027.30 -23797027.09 -23797026.87 0.0078 0.0007

Venus -69866-11-28 18:28 J -23796801.90 -23796801.73 -23796801.55 0.0077 0.0046

Mercury -69724-05-23 11:30 J -23745125.06 -23745125.02 -23745124.96 0.0060 0.0058

Mercury -69724-08-19 12:28 J -23745037.05 -23745036.98 -23745036.88 0.0060 0.0053

Mercury -69724-11-15 13:40 J -23744949.03 -23744948.93 -23744948.80 0.0060 0.0048

Mercury -69723-02-11 14:52 J -23744860.99 -23744860.88 -23744860.74 0.0060 0.0043

Mercury -69723-05-10 16:04 J -23744772.96 -23744772.83 -23744772.67 0.0060 0.0038

Mercury -69723-08-06 17:16 J -23744684.92 -23744684.78 -23744684.61 0.0061 0.0032

Mercury -69723-11-02 18:42 J -23744596.88 -23744596.72 -23744596.55 0.0061 0.0027

Mercury -69722-01-29 19:54 J -23744508.83 -23744508.67 -23744508.49 0.0061 0.0022

Mercury -69722-04-27 21:06 J -23744420.79 -23744420.62 -23744420.43 0.0061 0.0017

Mercury -69722-07-24 22:33 J -23744332.74 -23744332.56 -23744332.38 0.0061 0.0011

Mercury -69722-10-20 23:45 J -23744244.69 -23744244.51 -23744244.32 0.0061 0.0006

Mercury -69721-01-17 01:11 J -23744156.64 -23744156.45 -23744156.27 0.0061 0.0001

Mercury -69721-04-14 02:23 J -23744068.58 -23744068.40 -23744068.22 0.0061 0.0005

Mercury -69721-07-11 03:35 J -23743980.53 -23743980.35 -23743980.17 0.0061 0.0011

Mercury -69721-10-07 04:47 J -23743892.47 -23743892.30 -23743892.11 0.0061 0.0016

Mercury -69720-01-03 06:13 J -23743804.41 -23743804.24 -23743804.07 0.0061 0.0021

Mercury -69720-04-01 07:11 J -23743716.35 -23743716.20 -23743716.02 0.0061 0.0027

Mercury -69720-06-28 08:37 J -23743628.29 -23743628.14 -23743627.97 0.0061 0.0033

Mercury -69720-09-24 09:49 J -23743540.22 -23743540.09 -23743539.93 0.0061 0.0038

Mercury -69720-12-21 11:16 J -23743452.15 -23743452.03 -23743451.89 0.0062 0.0044

Mercury -69719-03-19 12:28 J -23743364.07 -23743363.98 -23743363.86 0.0062 0.0050

Mercury -69719-06-15 13:25 J -23743275.99 -23743275.94 -23743275.83 0.0062 0.0056

Mercury -69719-09-11 15:06 J -23743187.88 -23743187.87 -23743187.83 0.0062 0.0061

Moon -69711-10-01 11:30 J -23740246.28 -23740246.02 -23740245.74 0.0064 0.0008

Earth -69711-10-01 13:11 J -23740246.19 -23740245.95 -23740245.68 0.0064 0.0010 \*

Venus -69706-07-16 19:40 J -23738496.79 -23738496.68 -23738496.51 0.0066 0.0053

Venus -69705-02-27 01:54 J -23738271.63 -23738271.42 -23738271.19 0.0067 0.0018

Venus -69705-10-09 07:40 J -23738046.39 -23738046.18 -23738045.96 0.0067 0.0017

Venus -69704-05-22 13:11 J -23737821.07 -23737820.95 -23737820.79 0.0067 0.0052

Mercury -69631-09-28 16:33 J -23711028.84 -23711028.81 -23711028.77 0.0084 0.0081

Mercury -69631-12-25 17:59 J -23710940.81 -23710940.75 -23710940.66 0.0084 0.0070

Mercury -69630-03-23 19:40 J -23710852.77 -23710852.68 -23710852.58 0.0084 0.0059

Mercury -69630-06-19 21:06 J -23710764.73 -23710764.62 -23710764.50 0.0084 0.0048

Mercury -69630-09-15 22:33 J -23710676.68 -23710676.56 -23710676.43 0.0084 0.0038

Mercury -69630-12-12 23:59 J -23710588.62 -23710588.50 -23710588.36 0.0084 0.0027

Mercury -69629-03-10 01:25 J -23710500.57 -23710500.44 -23710500.29 0.0084 0.0017

Mercury -69629-06-06 03:06 J -23710412.51 -23710412.37 -23710412.23 0.0083 0.0006

Mercury -69629-09-02 04:33 J -23710324.45 -23710324.31 -23710324.17 0.0083 0.0005

Mercury -69629-11-29 05:59 J -23710236.39 -23710236.25 -23710236.12 0.0083 0.0015

Mercury -69628-02-25 07:11 J -23710148.32 -23710148.20 -23710148.06 0.0083 0.0026

Mercury -69628-05-24 08:37 J -23710060.26 -23710060.14 -23710060.01 0.0083 0.0036

Mercury -69628-08-20 10:04 J -23709972.19 -23709972.08 -23709971.96 0.0083 0.0046

Mercury -69628-11-16 11:16 J -23709884.12 -23709884.03 -23709883.92 0.0083 0.0056

Mercury -69627-02-12 12:42 J -23709796.04 -23709795.97 -23709795.88 0.0083 0.0066

Mercury -69627-05-11 14:09 J -23709707.96 -23709707.91 -23709707.85 0.0082 0.0076

Moon -69622-04-08 18:13 J -23707914.87 -23707914.74 -23707914.58 0.0080 0.0066

Earth -69622-04-08 21:06 J -23707914.74 -23707914.62 -23707914.43 0.0080 0.0064 \*

Venus -69620-12-25 16:33 J -23706922.87 -23706922.81 -23706922.72 0.0078 0.0073

Venus -69619-08-08 01:40 J -23706697.63 -23706697.43 -23706697.21 0.0078 0.0020

Venus -69618-03-21 10:18 J -23706472.25 -23706472.07 -23706471.86 0.0077 0.0033

Mercury -69477-09-27 21:35 J -23654780.65 -23654780.60 -23654780.53 0.0060 0.0057

Mercury -69477-12-24 22:47 J -23654692.63 -23654692.55 -23654692.45 0.0060 0.0052

Mercury -69476-03-22 23:45 J -23654604.61 -23654604.51 -23654604.38 0.0060 0.0047

Mercury -69476-06-19 00:57 J -23654516.57 -23654516.46 -23654516.31 0.0060 0.0042

Mercury -69476-09-15 02:09 J -23654428.54 -23654428.41 -23654428.25 0.0061 0.0037

Mercury -69476-12-12 03:21 J -23654340.50 -23654340.36 -23654340.18 0.0061 0.0032

Mercury -69475-03-10 05:01 J -23654252.45 -23654252.29 -23654252.12 0.0061 0.0026

Mercury -69475-06-06 05:59 J -23654164.41 -23654164.25 -23654164.07 0.0061 0.0021

Mercury -69475-09-02 07:11 J -23654076.36 -23654076.20 -23654076.01 0.0061 0.0016

Mercury -69475-11-29 08:37 J -23653988.32 -23653988.14 -23653987.95 0.0061 0.0010

Mercury -69474-02-25 10:04 J -23653900.27 -23653900.08 -23653899.90 0.0061 0.0005

Mercury -69474-05-24 11:16 J -23653812.21 -23653812.03 -23653811.85 0.0061 0.0001

Mercury -69474-08-20 12:28 J -23653724.16 -23653723.98 -23653723.79 0.0061 0.0006

Mercury -69474-11-16 13:40 J -23653636.11 -23653635.93 -23653635.74 0.0061 0.0012

Mercury -69473-02-12 14:52 J -23653548.05 -23653547.88 -23653547.69 0.0061 0.0017

Mercury -69473-05-10 16:04 J -23653459.99 -23653459.83 -23653459.65 0.0061 0.0023

Mercury -69473-08-06 17:16 J -23653371.93 -23653371.78 -23653371.60 0.0061 0.0028

Mercury -69473-11-02 18:42 J -23653283.86 -23653283.72 -23653283.55 0.0061 0.0034

Mercury -69472-01-29 19:40 J -23653195.80 -23653195.68 -23653195.51 0.0061 0.0040

Mercury -69472-04-27 21:21 J -23653107.72 -23653107.61 -23653107.47 0.0062 0.0045

Mercury -69472-07-24 22:18 J -23653019.65 -23653019.57 -23653019.44 0.0062 0.0051

Mercury -69472-10-20 23:59 J -23652931.56 -23652931.50 -23652931.41 0.0062 0.0056

Earth -69464-10-02 12:42 J -23650028.19 -23650027.97 -23650027.70 0.0064 0.0025

Moon -69464-10-02 13:11 J -23650028.19 -23650027.95 -23650027.69 0.0064 0.0027 \*

Mars -69460-06-30 02:09 J -23648661.56 -23648661.41 -23648661.19 0.0066 0.0056

Venus -69459-11-06 13:11 J -23648167.03 -23648166.95 -23648166.81 0.0066 0.0058

Venus -69458-06-19 19:25 J -23647941.90 -23647941.69 -23647941.47 0.0067 0.0023

Venus -69457-01-31 01:11 J -23647716.67 -23647716.45 -23647716.22 0.0067 0.0012

Venus -69457-09-12 06:57 J -23647491.35 -23647491.21 -23647491.04 0.0067 0.0047

Mercury -69383-02-03 04:04 J -23620684.37 -23620684.33 -23620684.28 0.0084 0.0079

Mercury -69383-05-02 05:16 J -23620596.34 -23620596.28 -23620596.18 0.0084 0.0068

Mercury -69383-07-29 06:57 J -23620508.30 -23620508.21 -23620508.10 0.0084 0.0057

Mercury -69383-10-25 08:23 J -23620420.26 -23620420.15 -23620420.02 0.0084 0.0046

Mercury -69382-01-21 10:04 J -23620332.20 -23620332.08 -23620331.95 0.0084 0.0035

Mercury -69382-04-19 11:30 J -23620244.15 -23620244.02 -23620243.88 0.0084 0.0024

Mercury -69382-07-16 12:57 J -23620156.09 -23620155.96 -23620155.82 0.0084 0.0014

Mercury -69382-10-12 14:23 J -23620068.03 -23620067.90 -23620067.76 0.0083 0.0004

Mercury -69381-01-08 15:49 J -23619979.97 -23619979.84 -23619979.70 0.0083 0.0007

Mercury -69381-04-05 17:16 J -23619891.91 -23619891.78 -23619891.64 0.0083 0.0017

Mercury -69381-07-02 18:42 J -23619803.85 -23619803.72 -23619803.59 0.0083 0.0028

Mercury -69381-09-28 19:54 J -23619715.78 -23619715.67 -23619715.54 0.0083 0.0038

Mercury -69381-12-25 21:21 J -23619627.71 -23619627.61 -23619627.49 0.0083 0.0048

Mercury -69380-03-23 22:47 J -23619539.64 -23619539.55 -23619539.45 0.0083 0.0058

Mercury -69380-06-20 00:13 J -23619451.56 -23619451.49 -23619451.41 0.0082 0.0068

Mercury -69380-09-16 01:25 J -23619363.47 -23619363.44 -23619363.39 0.0082 0.0078

Moon -69375-04-09 13:54 J -23617697.15 -23617696.92 -23617696.66 0.0080 0.0029

Earth -69375-04-09 16:33 J -23617697.03 -23617696.81 -23617696.55 0.0080 0.0028 \*

Mars -69372-01-05 21:49 J -23616694.64 -23616694.59 -23616694.48 0.0078 0.0076

Venus -69372-11-28 20:09 J -23616367.87 -23616367.66 -23616367.46 0.0078 0.0025

Venus -69371-07-12 04:33 J -23616142.50 -23616142.31 -23616142.10 0.0077 0.0028

Mercury -69230-11-07 06:57 J -23564524.23 -23564524.21 -23564524.14 0.0060 0.0059

Mercury -69229-02-03 08:09 J -23564436.22 -23564436.16 -23564436.05 0.0060 0.0054

Mercury -69229-05-01 09:21 J -23564348.19 -23564348.11 -23564347.98 0.0060 0.0049

Mercury -69229-07-28 10:33 J -23564260.16 -23564260.06 -23564259.91 0.0060 0.0044

Mercury -69229-10-24 12:13 J -23564172.13 -23564171.99 -23564171.84 0.0061 0.0038

Mercury -69228-01-20 13:25 J -23564084.09 -23564083.94 -23564083.78 0.0061 0.0033

Mercury -69228-04-18 14:37 J -23563996.05 -23563995.89 -23563995.72 0.0061 0.0028

Mercury -69228-07-15 15:49 J -23563908.00 -23563907.84 -23563907.66 0.0061 0.0023

Mercury -69228-10-11 17:16 J -23563819.95 -23563819.78 -23563819.60 0.0061 0.0017

Mercury -69227-01-07 18:28 J -23563731.91 -23563731.73 -23563731.55 0.0061 0.0012

Mercury -69227-04-05 19:40 J -23563643.86 -23563643.68 -23563643.49 0.0061 0.0007

Mercury -69227-07-02 21:06 J -23563555.81 -23563555.62 -23563555.44 0.0061 0.0001

Mercury -69227-09-28 22:18 J -23563467.75 -23563467.57 -23563467.39 0.0061 0.0004

Mercury -69227-12-25 23:30 J -23563379.70 -23563379.52 -23563379.33 0.0061 0.0010

Mercury -69226-03-24 00:42 J -23563291.64 -23563291.47 -23563291.28 0.0061 0.0015

Mercury -69226-06-20 01:54 J -23563203.58 -23563203.42 -23563203.24 0.0061 0.0021

Mercury -69226-09-16 03:06 J -23563115.52 -23563115.37 -23563115.19 0.0061 0.0026

Mercury -69226-12-13 04:33 J -23563027.46 -23563027.31 -23563027.14 0.0061 0.0032

Mercury -69225-03-10 05:59 J -23562939.39 -23562939.25 -23562939.10 0.0061 0.0037

Mercury -69225-06-06 06:57 J -23562851.32 -23562851.21 -23562851.06 0.0062 0.0043

Mercury -69225-09-02 08:09 J -23562763.25 -23562763.16 -23562763.02 0.0062 0.0049

Mercury -69225-11-29 09:49 J -23562675.17 -23562675.09 -23562674.99 0.0062 0.0054

Mercury -69224-02-25 10:47 J -23562587.07 -23562587.05 -23562586.98 0.0062 0.0060

Earth -69217-10-03 15:49 J -23559810.05 -23559809.84 -23559809.58 0.0064 0.0030

Moon -69217-10-03 17:59 J -23559809.97 -23559809.75 -23559809.48 0.0064 0.0027 \*

Moon -69216-10-05 04:47 J -23559443.41 -23559443.30 -23559443.17 0.0065 0.0057

Earth -69216-10-05 04:33 J -23559443.38 -23559443.31 -23559443.19 0.0065 0.0060 \*

Venus -69211-02-27 09:21 J -23557837.20 -23557837.11 -23557836.96 0.0066 0.0056

Venus -69211-10-10 15:21 J -23557612.06 -23557611.86 -23557611.63 0.0067 0.0021

Venus -69210-05-23 21:21 J -23557386.83 -23557386.61 -23557386.39 0.0067 0.0014

Venus -69209-01-04 02:37 J -23557161.52 -23557161.39 -23557161.22 0.0067 0.0050

Mercury -69136-03-14 15:21 J -23530427.89 -23530427.86 -23530427.81 0.0084 0.0080

Mercury -69136-06-10 17:01 J -23530339.87 -23530339.79 -23530339.71 0.0084 0.0069

Mercury -69136-09-06 18:13 J -23530251.83 -23530251.74 -23530251.63 0.0084 0.0058

Mercury -69136-12-03 19:54 J -23530163.78 -23530163.67 -23530163.55 0.0084 0.0047

Mercury -69135-03-01 21:35 J -23530075.73 -23530075.60 -23530075.48 0.0084 0.0036

Mercury -69135-05-28 22:47 J -23529987.67 -23529987.55 -23529987.41 0.0084 0.0026

Mercury -69135-08-25 00:28 J -23529899.62 -23529899.48 -23529899.34 0.0084 0.0015

Mercury -69135-11-21 01:54 J -23529811.56 -23529811.42 -23529811.28 0.0083 0.0004

Mercury -69134-02-17 03:21 J -23529723.50 -23529723.36 -23529723.22 0.0083 0.0006

Mercury -69134-05-16 04:47 J -23529635.44 -23529635.30 -23529635.17 0.0083 0.0017

Mercury -69134-08-12 05:59 J -23529547.37 -23529547.25 -23529547.11 0.0083 0.0027

Mercury -69134-11-08 07:25 J -23529459.31 -23529459.19 -23529459.06 0.0083 0.0037

Mercury -69133-02-04 08:52 J -23529371.24 -23529371.13 -23529371.01 0.0083 0.0047

Mercury -69133-05-02 10:18 J -23529283.17 -23529283.07 -23529282.97 0.0083 0.0057

Mercury -69133-07-29 11:30 J -23529195.09 -23529195.02 -23529194.93 0.0083 0.0067

Mercury -69133-10-25 12:57 J -23529107.00 -23529106.96 -23529106.91 0.0082 0.0077

Moon -69128-04-10 17:45 J -23527479.02 -23527478.76 -23527478.50 0.0080 0.0016

Earth -69128-04-10 18:57 J -23527478.95 -23527478.71 -23527478.45 0.0080 0.0020 \*

Mars -69126-05-27 16:33 J -23526701.88 -23526701.81 -23526701.68 0.0079 0.0074

Venus -69125-08-08 09:35 J -23526263.18 -23526263.10 -23526262.99 0.0078 0.0069

Venus -69124-03-21 18:42 J -23526037.93 -23526037.72 -23526037.50 0.0078 0.0016

Venus -69124-11-02 03:21 J -23525812.54 -23525812.36 -23525812.17 0.0077 0.0037

# 69TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 69th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-68983-12-16 18:28 J	-23474267.78	-23474267.73	-23474267.66	0.0060	0.0057		
Mercury	-68982-03-14 19:40 J	-23474179.76	-23474179.68	-23474179.58	0.0060	0.0052		
Mercury	-68982-06-10 20:52 J	-23474091.74	-23474091.63	-23474091.51	0.0060	0.0047		
Mercury	-68982-09-06 21:49 J	-23474003.70	-23474003.59	-23474003.44	0.0061	0.0042		
Mercury	-68982-12-03 23:01 J	-23473915.67	-23473915.54	-23473915.38	0.0061	0.0037		
Mercury	-68981-03-01 00:13 J	-23473827.63	-23473827.49	-23473827.31	0.0061	0.0032		



Mercury -68981-05-28 01:54 J -23473739.58 -23473739.42 -23473739.25 0.0061 0.0026

Mercury -68981-08-24 03:06 J -23473651.54 -23473651.37 -23473651.20 0.0061 0.0021

Mercury -68981-11-20 04:18 J -23473563.49 -23473563.32 -23473563.14 0.0061 0.0016

Mercury -68980-02-16 05:30 J -23473475.44 -23473475.27 -23473475.08 0.0061 0.0011

Mercury -68980-05-15 06:57 J -23473387.39 -23473387.21 -23473387.03 0.0061 0.0005

Mercury -68980-08-11 08:09 J -23473299.34 -23473299.16 -23473298.97 0.0061 0.0001

Mercury -68980-11-07 09:21 J -23473211.29 -23473211.11 -23473210.92 0.0061 0.0006

Mercury -68979-02-03 10:33 J -23473123.23 -23473123.06 -23473122.87 0.0061 0.0011

Mercury -68979-05-02 11:59 J -23473035.18 -23473035.00 -23473034.82 0.0061 0.0016

Mercury -68979-07-29 12:57 J -23472947.12 -23472946.96 -23472946.77 0.0061 0.0022

Mercury -68979-10-25 14:23 J -23472859.06 -23472858.90 -23472858.73 0.0061 0.0027

Mercury -68978-01-21 15:49 J -23472770.99 -23472770.84 -23472770.68 0.0061 0.0033

Mercury -68978-04-19 16:47 J -23472682.92 -23472682.80 -23472682.64 0.0062 0.0039

Mercury -68978-07-16 18:28 J -23472594.85 -23472594.73 -23472594.60 0.0062 0.0044

Mercury -68978-10-12 19:25 J -23472506.78 -23472506.69 -23472506.56 0.0062 0.0050

Mercury -68977-01-08 20:37 J -23472418.69 -23472418.64 -23472418.54 0.0062 0.0056

Mercury -68977-04-05 22:18 J -23472330.58 -23472330.57 -23472330.53 0.0062 0.0061

Earth -68970-10-05 23:59 J -23469591.75 -23469591.50 -23469591.25 0.0064 0.0021

Moon -68970-10-06 03:21 J -23469591.60 -23469591.36 -23469591.11 0.0064 0.0023 \*

Mars -68965-02-28 07:11 J -23467985.29 -23467985.20 -23467985.00 0.0066 0.0060

Venus -68964-06-20 09:06 J -23467507.28 -23467507.12 -23467506.95 0.0067 0.0045

Venus -68963-01-31 14:52 J -23467282.10 -23467281.88 -23467281.65 0.0067 0.0010

Venus -68963-09-13 20:37 J -23467056.84 -23467056.64 -23467056.42 0.0067 0.0025

Venus -68962-04-27 02:09 J -23466831.48 -23466831.41 -23466831.30 0.0067 0.0061

Mercury -68889-04-23 03:49 J -23440171.39 -23440171.34 -23440171.27 0.0084 0.0076

Mercury -68889-07-20 05:30 J -23440083.36 -23440083.27 -23440083.18 0.0084 0.0065

Mercury -68889-10-16 06:42 J -23439995.31 -23439995.22 -23439995.10 0.0084 0.0054

Mercury -68888-01-12 08:23 J -23439907.27 -23439907.15 -23439907.03 0.0084 0.0043

Mercury -68888-04-10 09:49 J -23439819.21 -23439819.09 -23439818.96 0.0084 0.0032

Mercury -68888-07-07 11:16 J -23439731.16 -23439731.03 -23439730.89 0.0084 0.0022

Mercury -68888-10-03 12:42 J -23439643.10 -23439642.97 -23439642.82 0.0083 0.0012

Mercury -68888-12-30 14:23 J -23439555.04 -23439554.90 -23439554.76 0.0083 0.0002

Mercury -68887-03-28 15:35 J -23439466.98 -23439466.85 -23439466.70 0.0083 0.0011

Mercury -68887-06-24 17:01 J -23439378.92 -23439378.79 -23439378.65 0.0083 0.0020

Mercury -68887-09-20 18:28 J -23439290.85 -23439290.73 -23439290.60 0.0083 0.0030

Mercury -68887-12-17 19:54 J -23439202.79 -23439202.67 -23439202.55 0.0083 0.0040

Mercury -68886-03-15 21:06 J -23439114.72 -23439114.62 -23439114.50 0.0083 0.0051

Mercury -68886-06-11 22:18 J -23439026.64 -23439026.57 -23439026.46 0.0083 0.0061

Mercury -68886-09-07 23:45 J -23438938.57 -23438938.51 -23438938.42 0.0082 0.0071

Mercury -68886-12-05 01:25 J -23438850.47 -23438850.44 -23438850.41 0.0082 0.0080

Earth -68881-04-12 01:40 J -23437260.65 -23437260.43 -23437260.17 0.0080 0.0030

Moon -68881-04-12 02:23 J -23437260.63 -23437260.40 -23437260.15 0.0080 0.0033 \*

Venus -68878-11-30 11:01 J -23435933.18 -23435933.04 -23435932.86 0.0078 0.0051

Venus -68877-07-12 20:09 J -23435707.87 -23435707.66 -23435707.44 0.0078 0.0002

Venus -68876-02-23 04:33 J -23435482.45 -23435482.31 -23435482.14 0.0077 0.0055

Mercury -68736-10-29 04:47 J -23384099.33 -23384099.30 -23384099.23 0.0060 0.0058

Mercury -68735-01-25 05:59 J -23384011.31 -23384011.25 -23384011.14 0.0060 0.0053

Mercury -68735-04-23 07:11 J -23383923.29 -23383923.20 -23383923.07 0.0060 0.0048

Mercury -68735-07-20 08:52 J -23383835.26 -23383835.13 -23383835.00 0.0061 0.0043

Mercury -68735-10-16 09:49 J -23383747.22 -23383747.09 -23383746.94 0.0061 0.0038

Mercury -68734-01-12 11:01 J -23383659.18 -23383659.04 -23383658.88 0.0061 0.0033

Mercury -68734-04-10 12:13 J -23383571.14 -23383570.99 -23383570.81 0.0061 0.0028

Mercury -68734-07-07 13:25 J -23383483.10 -23383482.94 -23383482.76 0.0061 0.0023

Mercury -68734-10-03 14:52 J -23383395.05 -23383394.88 -23383394.70 0.0061 0.0017

Mercury -68734-12-30 16:04 J -23383307.00 -23383306.83 -23383306.64 0.0061 0.0012

Mercury -68733-03-27 17:16 J -23383218.95 -23383218.78 -23383218.59 0.0061 0.0007

Mercury -68733-06-23 18:42 J -23383130.90 -23383130.72 -23383130.53 0.0061 0.0001

Mercury -68733-09-19 19:54 J -23383042.85 -23383042.67 -23383042.48 0.0061 0.0004

Mercury -68733-12-16 21:21 J -23382954.79 -23382954.61 -23382954.43 0.0061 0.0010

Mercury -68732-03-14 22:18 J -23382866.74 -23382866.57 -23382866.38 0.0061 0.0015

Mercury -68732-06-10 23:45 J -23382778.68 -23382778.51 -23382778.33 0.0061 0.0020

Mercury -68732-09-07 01:11 J -23382690.62 -23382690.45 -23382690.28 0.0061 0.0026

Mercury -68732-12-04 02:09 J -23382602.55 -23382602.41 -23382602.24 0.0061 0.0032

Mercury -68731-03-02 03:35 J -23382514.49 -23382514.35 -23382514.19 0.0062 0.0037

Mercury -68731-05-29 04:47 J -23382426.42 -23382426.30 -23382426.15 0.0062 0.0043

Mercury -68731-08-25 06:13 J -23382338.34 -23382338.24 -23382338.12 0.0062 0.0048

Mercury -68731-11-21 07:25 J -23382250.26 -23382250.19 -23382250.09 0.0062 0.0054

Mercury -68730-02-17 08:23 J -23382162.17 -23382162.15 -23382162.07 0.0062 0.0060

Earth -68723-10-07 11:01 J -23379373.30 -23379373.04 -23379372.78 0.0064 0.0003

Moon -68723-10-07 14:37 J -23379373.15 -23379372.89 -23379372.63 0.0064 0.0004 \*

Mars -68719-07-18 17:16 J -23377993.12 -23377992.78 -23377992.42 0.0066 0.0009

Venus -68717-02-29 04:47 J -23377402.36 -23377402.30 -23377402.21 0.0066 0.0063

Venus -68717-10-11 10:47 J -23377177.25 -23377177.05 -23377176.84 0.0067 0.0028

Venus -68716-05-24 16:33 J -23376952.03 -23376951.81 -23376951.58 0.0067 0.0007

Venus -68715-01-04 22:04 J -23376726.73 -23376726.58 -23376726.39 0.0067 0.0044

Mercury -68642-03-06 16:04 J -23350002.88 -23350002.83 -23350002.76 0.0084 0.0075

Mercury -68642-06-02 17:45 J -23349914.84 -23349914.76 -23349914.67 0.0084 0.0064

Mercury -68642-08-29 19:25 J -23349826.80 -23349826.69 -23349826.58 0.0084 0.0053

Mercury -68642-11-25 20:37 J -23349738.75 -23349738.64 -23349738.51 0.0084 0.0043

Mercury -68641-02-21 22:18 J -23349650.70 -23349650.57 -23349650.44 0.0084 0.0032

Mercury -68641-05-19 23:45 J -23349562.64 -23349562.51 -23349562.37 0.0084 0.0022

Mercury -68641-08-16 01:11 J -23349474.58 -23349474.45 -23349474.31 0.0083 0.0011

Mercury -68641-11-12 02:52 J -23349386.52 -23349386.38 -23349386.24 0.0083 0.0002

Mercury -68640-02-08 04:04 J -23349298.46 -23349298.33 -23349298.19 0.0083 0.0010

Mercury -68640-05-07 05:30 J -23349210.40 -23349210.27 -23349210.13 0.0083 0.0020

Mercury -68640-08-03 06:57 J -23349122.34 -23349122.21 -23349122.08 0.0083 0.0030

Mercury -68640-10-30 08:23 J -23349034.27 -23349034.15 -23349034.03 0.0083 0.0040

Mercury -68639-01-26 09:35 J -23348946.20 -23348946.10 -23348945.98 0.0083 0.0051

Mercury -68639-04-24 10:47 J -23348858.13 -23348858.05 -23348857.94 0.0083 0.0061

Mercury -68639-07-21 12:13 J -23348770.05 -23348769.99 -23348769.91 0.0082 0.0070

Mercury -68639-10-17 13:54 J -23348681.95 -23348681.92 -23348681.89 0.0082 0.0080

Earth -68634-04-14 16:18 J -23347041.95 -23347041.82 -23347041.67 0.0080 0.0066

Moon -68634-04-14 18:13 J -23347041.86 -23347041.74 -23347041.56 0.0080 0.0065 \*

Venus -68631-08-10 07:40 J -23345828.25 -23345828.18 -23345828.08 0.0078 0.0071

Venus -68630-03-23 16:47 J -23345603.01 -23345602.80 -23345602.59 0.0078 0.0018

Venus -68630-11-04 01:25 J -23345377.63 -23345377.44 -23345377.24 0.0077 0.0035

Mercury -68489-09-10 17:01 J -23293930.84 -23293930.79 -23293930.72 0.0060 0.0057

Mercury -68489-12-07 17:59 J -23293842.83 -23293842.75 -23293842.64 0.0060 0.0052

Mercury -68488-03-05 19:11 J -23293754.80 -23293754.70 -23293754.57 0.0061 0.0047

Mercury -68488-06-01 20:23 J -23293666.77 -23293666.65 -23293666.50 0.0061 0.0042

Mercury -68488-08-28 21:35 J -23293578.73 -23293578.60 -23293578.44 0.0061 0.0037

Mercury -68488-11-24 22:47 J -23293490.69 -23293490.55 -23293490.38 0.0061 0.0032

Mercury -68487-02-21 00:13 J -23293402.65 -23293402.49 -23293402.32 0.0061 0.0026

Mercury -68487-05-20 01:25 J -23293314.60 -23293314.44 -23293314.26 0.0061 0.0021

Mercury -68487-08-16 02:37 J -23293226.56 -23293226.39 -23293226.20 0.0061 0.0016

Mercury -68487-11-12 04:04 J -23293138.51 -23293138.33 -23293138.15 0.0061 0.0010

Mercury -68486-02-08 05:16 J -23293050.46 -23293050.28 -23293050.09 0.0061 0.0005

Mercury -68486-05-07 06:42 J -23292962.41 -23292962.22 -23292962.04 0.0061 0.0001

Mercury -68486-08-03 07:54 J -23292874.35 -23292874.17 -23292873.99 0.0061 0.0006

Mercury -68486-10-30 08:52 J -23292786.30 -23292786.13 -23292785.94 0.0061 0.0012

Mercury -68485-01-26 10:18 J -23292698.24 -23292698.07 -23292697.89 0.0061 0.0016

Mercury -68485-04-23 11:45 J -23292610.18 -23292610.01 -23292609.84 0.0061 0.0022

Mercury -68485-07-20 12:42 J -23292522.12 -23292521.97 -23292521.79 0.0061 0.0028

Mercury -68485-10-16 14:09 J -23292434.06 -23292433.91 -23292433.75 0.0062 0.0033

Mercury -68484-01-12 15:06 J -23292345.99 -23292345.87 -23292345.70 0.0062 0.0039

Mercury -68484-04-10 16:47 J -23292257.92 -23292257.80 -23292257.66 0.0062 0.0044

Mercury -68484-07-07 17:45 J -23292169.84 -23292169.76 -23292169.63 0.0062 0.0050

Mercury -68484-10-03 19:25 J -23292081.76 -23292081.69 -23292081.60 0.0062 0.0055

Mercury -68484-12-30 20:23 J -23291993.65 -23291993.65 -23291993.59 0.0062 0.0061

Moon -68477-10-07 12:28 J -23289520.99 -23289520.98 -23289520.91 0.0064 0.0064

Earth -68477-10-07 13:11 J -23289520.99 -23289520.95 -23289520.84 0.0064 0.0062 \*  
 Earth -68476-10-09 01:54 J -23289154.64 -23289154.42 -23289154.17 0.0065 0.0027  
 Moon -68476-10-09 04:47 J -23289154.51 -23289154.30 -23289154.06 0.0065 0.0030 \*  
 Mars -68473-12-06 12:13 J -23288000.17 -23287999.99 -23287999.79 0.0066 0.0055  
 Venus -68470-06-22 08:37 J -23287072.30 -23287072.14 -23287071.93 0.0067 0.0039  
 Venus -68469-02-02 15:06 J -23286847.10 -23286846.87 -23286846.65 0.0067 0.0003  
 Venus -68469-09-14 21:06 J -23286621.82 -23286621.62 -23286621.43 0.0067 0.0033  
 Mercury -68396-10-21 03:49 J -23259922.37 -23259922.34 -23259922.30 0.0084 0.0082  
 Mercury -68395-01-17 05:01 J -23259834.34 -23259834.29 -23259834.20 0.0084 0.0072  
 Mercury -68395-04-15 06:42 J -23259746.30 -23259746.22 -23259746.11 0.0084 0.0060  
 Mercury -68395-07-12 08:23 J -23259658.26 -23259658.15 -23259658.03 0.0084 0.0049  
 Mercury -68395-10-08 09:49 J -23259570.21 -23259570.09 -23259569.96 0.0084 0.0039  
 Mercury -68394-01-04 11:30 J -23259482.15 -23259482.02 -23259481.89 0.0084 0.0028  
 Mercury -68394-04-02 12:57 J -23259394.10 -23259393.96 -23259393.82 0.0084 0.0017  
 Mercury -68394-06-29 14:23 J -23259306.04 -23259305.90 -23259305.76 0.0083 0.0007  
 Mercury -68394-09-25 15:49 J -23259217.98 -23259217.84 -23259217.70 0.0083 0.0004  
 Mercury -68394-12-22 17:16 J -23259129.92 -23259129.78 -23259129.64 0.0083 0.0014  
 Mercury -68393-03-19 18:42 J -23259041.85 -23259041.72 -23259041.59 0.0083 0.0024  
 Mercury -68393-06-15 20:09 J -23258953.79 -23258953.66 -23258953.53 0.0083 0.0034  
 Mercury -68393-09-11 21:35 J -23258865.72 -23258865.60 -23258865.48 0.0083 0.0044  
 Mercury -68393-12-08 22:47 J -23258777.65 -23258777.55 -23258777.44 0.0083 0.0054  
 Mercury -68392-03-07 00:13 J -23258689.57 -23258689.49 -23258689.40 0.0082 0.0064  
 Mercury -68392-06-03 01:25 J -23258601.49 -23258601.44 -23258601.37 0.0082 0.0074  
 Moon -68388-04-14 02:52 J -23257190.56 -23257190.38 -23257190.15 0.0080 0.0050  
 Earth -68388-04-14 06:42 J -23257190.40 -23257190.22 -23257190.00 0.0080 0.0052 \*  
 Mars -68385-06-18 06:57 J -23256029.29 -23256029.21 -23256029.07 0.0078 0.0073  
 Venus -68384-12-01 15:35 J -23255498.05 -23255497.85 -23255497.65 0.0078 0.0031  
 Venus -68383-07-15 00:13 J -23255272.69 -23255272.49 -23255272.28 0.0077 0.0022  
 Venus -68382-02-25 08:52 J -23255047.19 -23255047.13 -23255047.06 0.0077 0.0073  
 Mercury -68242-04-28 03:49 J -23203850.35 -23203850.34 -23203850.28 0.0060 0.0059

Mercury -68242-07-25 05:01 J -23203762.35 -23203762.29 -23203762.19 0.0060 0.0054

Mercury -68242-10-21 05:59 J -23203674.32 -23203674.25 -23203674.12 0.0061 0.0050

Mercury -68241-01-17 07:54 J -23203586.29 -23203586.17 -23203586.05 0.0061 0.0044

Mercury -68241-04-14 08:52 J -23203498.26 -23203498.13 -23203497.98 0.0061 0.0039

Mercury -68241-07-11 10:04 J -23203410.22 -23203410.08 -23203409.92 0.0061 0.0034

Mercury -68241-10-07 11:16 J -23203322.18 -23203322.03 -23203321.86 0.0061 0.0029

Mercury -68240-01-03 12:28 J -23203234.14 -23203233.98 -23203233.80 0.0061 0.0024

Mercury -68240-04-01 13:54 J -23203146.09 -23203145.92 -23203145.74 0.0061 0.0018

Mercury -68240-06-28 15:06 J -23203058.05 -23203057.87 -23203057.69 0.0061 0.0013

Mercury -68240-09-24 16:18 J -23202970.00 -23202969.82 -23202969.63 0.0061 0.0008

Mercury -68240-12-21 17:30 J -23202881.95 -23202881.77 -23202881.58 0.0061 0.0003

Mercury -68239-03-19 18:57 J -23202793.89 -23202793.71 -23202793.53 0.0061 0.0003

Mercury -68239-06-15 20:09 J -23202705.84 -23202705.66 -23202705.48 0.0061 0.0008

Mercury -68239-09-11 21:21 J -23202617.78 -23202617.61 -23202617.43 0.0061 0.0014

Mercury -68239-12-08 22:18 J -23202529.73 -23202529.57 -23202529.38 0.0061 0.0020

Mercury -68238-03-06 23:45 J -23202441.67 -23202441.51 -23202441.33 0.0061 0.0025

Mercury -68238-06-03 01:11 J -23202353.61 -23202353.45 -23202353.29 0.0062 0.0030

Mercury -68238-08-30 02:09 J -23202265.54 -23202265.41 -23202265.24 0.0062 0.0036

Mercury -68238-11-26 03:49 J -23202177.47 -23202177.34 -23202177.20 0.0062 0.0041

Mercury -68237-02-22 04:47 J -23202089.40 -23202089.30 -23202089.16 0.0062 0.0047

Mercury -68237-05-20 06:28 J -23202001.32 -23202001.23 -23202001.13 0.0062 0.0052

Mercury -68237-08-16 07:25 J -23201913.23 -23201913.19 -23201913.11 0.0062 0.0058

Earth -68230-10-10 05:59 J -23199302.46 -23199302.25 -23199301.99 0.0064 0.0028

Moon -68230-10-10 07:40 J -23199302.42 -23199302.18 -23199301.92 0.0064 0.0023 \*

Earth -68229-10-10 18:28 J -23198935.78 -23198935.73 -23198935.63 0.0065 0.0062

Moon -68229-10-10 19:40 J -23198935.76 -23198935.68 -23198935.56 0.0065 0.0059 \*

Venus -68223-03-02 08:37 J -23196967.29 -23196967.14 -23196966.96 0.0067 0.0045

Venus -68223-10-13 14:37 J -23196742.11 -23196741.89 -23196741.66 0.0067 0.0010

Venus -68222-05-26 20:23 J -23196516.85 -23196516.65 -23196516.43 0.0067 0.0026

Venus -68221-01-07 02:23 J -23196291.47 -23196291.40 -23196291.31 0.0068 0.0063

Mercury	-68149-06-06 16:18 J	-23169841.82	-23169841.82	-23169841.79	0.0084	0.0084
Mercury	-68149-09-02 17:59 J	-23169753.81	-23169753.75	-23169753.67	0.0084	0.0073
Mercury	-68149-11-29 19:25 J	-23169665.77	-23169665.69	-23169665.59	0.0084	0.0062
Mercury	-68148-02-25 20:52 J	-23169577.73	-23169577.63	-23169577.51	0.0084	0.0051
Mercury	-68148-05-24 22:33 J	-23169489.68	-23169489.56	-23169489.43	0.0084	0.0040
Mercury	-68148-08-20 23:59 J	-23169401.62	-23169401.50	-23169401.36	0.0084	0.0030
Mercury	-68148-11-17 01:40 J	-23169313.57	-23169313.43	-23169313.30	0.0084	0.0019
Mercury	-68147-02-13 03:06 J	-23169225.51	-23169225.37	-23169225.23	0.0083	0.0009
Mercury	-68147-05-12 04:33 J	-23169137.45	-23169137.31	-23169137.17	0.0083	0.0002
Mercury	-68147-08-08 05:59 J	-23169049.39	-23169049.25	-23169049.11	0.0083	0.0012
Mercury	-68147-11-04 07:25 J	-23168961.32	-23168961.19	-23168961.06	0.0083	0.0022
Mercury	-68146-01-31 08:52 J	-23168873.26	-23168873.13	-23168873.00	0.0083	0.0032
Mercury	-68146-04-29 10:04 J	-23168785.19	-23168785.08	-23168784.95	0.0083	0.0043
Mercury	-68146-07-26 11:16 J	-23168697.12	-23168697.03	-23168696.91	0.0083	0.0053
Mercury	-68146-10-22 12:42 J	-23168609.04	-23168608.97	-23168608.87	0.0083	0.0063
Mercury	-68145-01-18 14:23 J	-23168520.96	-23168520.90	-23168520.83	0.0082	0.0072
Mercury	-68145-04-15 15:35 J	-23168432.86	-23168432.85	-23168432.83	0.0082	0.0082
Moon	-68141-04-16 04:33 J	-23166971.57	-23166971.31	-23166971.05	0.0080	0.0015
Earth	-68141-04-16 06:42 J	-23166971.46	-23166971.22	-23166970.96	0.0080	0.0019 *
Mars	-68139-11-08 07:54 J	-23166035.42	-23166035.17	-23166034.89	0.0079	0.0030
Venus	-68137-08-11 17:16 J	-23165392.96	-23165392.78	-23165392.58	0.0078	0.0034
Venus	-68136-03-25 01:54 J	-23165167.62	-23165167.42	-23165167.20	0.0077	0.0019
Venus	-68136-11-05 10:04 J	-23164942.14	-23164942.08	-23164941.97	0.0077	0.0071

# 68TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 68th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-67996-12-12 15:35 J	-23113769.86	-23113769.85	-23113769.79	0.0060	0.0060		
Mercury	-67995-03-10 16:47 J	-23113681.85	-23113681.80	-23113681.70	0.0060	0.0055		
Mercury	-67995-06-06 17:59 J	-23113593.83	-23113593.75	-23113593.62	0.0061	0.0050		
Mercury	-67995-09-02 19:11 J	-23113505.80	-23113505.70	-23113505.56	0.0061	0.0045		
Mercury	-67995-11-29 20:23 J	-23113417.77	-23113417.65	-23113417.49	0.0061	0.0040		
Mercury	-67994-02-25 22:04 J	-23113329.73	-23113329.58	-23113329.43	0.0061	0.0034		
Mercury	-67994-05-24 23:16 J	-23113241.69	-23113241.53	-23113241.37	0.0061	0.0029		
Mercury	-67994-08-21 00:13 J	-23113153.64	-23113153.49	-23113153.31	0.0061	0.0024		
Mercury	-67994-11-17 01:25 J	-23113065.60	-23113065.44	-23113065.25	0.0061	0.0019		
Mercury	-67993-02-13 02:52 J	-23112977.55	-23112977.38	-23112977.20	0.0061	0.0014		
Mercury	-67993-05-11 04:18 J	-23112889.50	-23112889.32	-23112889.14	0.0061	0.0008		
Mercury	-67993-08-07 05:30 J	-23112801.45	-23112801.27	-23112801.09	0.0061	0.0003		
Mercury	-67993-11-03 06:42 J	-23112713.40	-23112713.22	-23112713.03	0.0061	0.0002		
Mercury	-67992-01-30 08:09 J	-23112625.35	-23112625.16	-23112624.98	0.0061	0.0008		
Mercury	-67992-04-28 09:06 J	-23112537.29	-23112537.12	-23112536.93	0.0061	0.0013		
Mercury	-67992-07-25 10:18 J	-23112449.23	-23112449.07	-23112448.88	0.0061	0.0019		
Mercury	-67992-10-21 11:45 J	-23112361.17	-23112361.01	-23112360.84	0.0061	0.0024		
Mercury	-67991-01-17 12:42 J	-23112273.11	-23112272.97	-23112272.79	0.0062	0.0030		
Mercury	-67991-04-15 14:09 J	-23112185.05	-23112184.91	-23112184.75	0.0062	0.0035		
Mercury	-67991-07-12 15:21 J	-23112096.98	-23112096.86	-23112096.71	0.0062	0.0041		
Mercury	-67991-10-08 16:47 J	-23112008.91	-23112008.80	-23112008.67	0.0062	0.0046		
Mercury	-67990-01-04 17:45 J	-23111920.83	-23111920.76	-23111920.63	0.0062	0.0052		
Mercury	-67990-04-02 19:25 J	-23111832.75	-23111832.69	-23111832.61	0.0062	0.0057		
Earth	-67983-10-12 01:54 J	-23109083.66	-23109083.42	-23109083.16	0.0064	0.0015		
Moon	-67983-10-12 05:01 J	-23109083.55	-23109083.29	-23109083.02	0.0064	0.0013	*	
Venus	-67977-11-10 10:04 J	-23106862.22	-23106862.08	-23106861.90	0.0067	0.0047		



Venus -67976-06-23 16:18 J -23106637.05 -23106636.82 -23106636.60 0.0067 0.0011  
 Venus -67975-02-03 22:04 J -23106411.79 -23106411.58 -23106411.36 0.0067 0.0025  
 Venus -67975-09-17 03:35 J -23106186.41 -23106186.35 -23106186.23 0.0068 0.0062  
 Mercury -67902-01-22 05:30 J -23079761.27 -23079761.27 -23079761.26 0.0084 0.0084  
 Mercury -67902-04-20 06:42 J -23079673.27 -23079673.22 -23079673.14 0.0084 0.0074  
 Mercury -67902-07-17 08:23 J -23079585.23 -23079585.15 -23079585.05 0.0084 0.0062  
 Mercury -67902-10-13 10:04 J -23079497.19 -23079497.08 -23079496.97 0.0084 0.0051  
 Mercury -67901-01-09 11:30 J -23079409.14 -23079409.02 -23079408.89 0.0084 0.0041  
 Mercury -67901-04-06 13:11 J -23079321.08 -23079320.95 -23079320.82 0.0084 0.0030  
 Mercury -67901-07-03 14:37 J -23079233.03 -23079232.89 -23079232.75 0.0084 0.0020  
 Mercury -67901-09-29 16:04 J -23079144.97 -23079144.83 -23079144.69 0.0083 0.0009  
 Mercury -67901-12-26 17:30 J -23079056.91 -23079056.77 -23079056.63 0.0083 0.0001  
 Mercury -67900-03-24 18:57 J -23078968.85 -23078968.71 -23078968.57 0.0083 0.0012  
 Mercury -67900-06-20 20:23 J -23078880.78 -23078880.65 -23078880.51 0.0083 0.0022  
 Mercury -67900-09-16 21:35 J -23078792.72 -23078792.60 -23078792.46 0.0083 0.0032  
 Mercury -67900-12-13 23:01 J -23078704.65 -23078704.54 -23078704.41 0.0083 0.0042  
 Mercury -67899-03-12 00:28 J -23078616.58 -23078616.48 -23078616.37 0.0083 0.0052  
 Mercury -67899-06-08 01:54 J -23078528.51 -23078528.42 -23078528.32 0.0083 0.0062  
 Mercury -67899-09-04 03:06 J -23078440.43 -23078440.37 -23078440.29 0.0082 0.0072  
 Mercury -67899-12-01 04:18 J -23078352.32 -23078352.32 -23078352.28 0.0082 0.0082  
 Moon -67895-04-17 01:25 J -23077119.46 -23077119.44 -23077119.39 0.0080 0.0080  
 Earth -67895-04-17 02:37 J -23077119.45 -23077119.39 -23077119.27 0.0080 0.0076 \*  
 Mars -67892-03-30 11:01 J -23076041.31 -23076041.04 -23076040.74 0.0079 0.0008  
 Venus -67890-04-22 20:09 J -23075287.86 -23075287.66 -23075287.47 0.0078 0.0034  
 Venus -67890-12-04 04:18 J -23075062.51 -23075062.32 -23075062.10 0.0077 0.0019  
 Venus -67889-07-16 12:28 J -23074837.03 -23074836.98 -23074836.87 0.0077 0.0071  
 Mercury -67749-07-29 03:35 J -23023689.36 -23023689.35 -23023689.29 0.0060 0.0059  
 Mercury -67749-10-25 04:47 J -23023601.36 -23023601.30 -23023601.20 0.0060 0.0055  
 Mercury -67748-01-21 05:59 J -23023513.33 -23023513.25 -23023513.13 0.0061 0.0050  
 Mercury -67748-04-19 07:11 J -23023425.30 -23023425.20 -23023425.06 0.0061 0.0045

Mercury -67748-07-16 08:52 J -23023337.27 -23023337.13 -23023336.99 0.0061 0.0039

Mercury -67748-10-12 10:04 J -23023249.23 -23023249.08 -23023248.93 0.0061 0.0034

Mercury -67747-01-08 11:01 J -23023161.19 -23023161.04 -23023160.87 0.0061 0.0029

Mercury -67747-04-06 12:13 J -23023073.15 -23023072.99 -23023072.81 0.0061 0.0024

Mercury -67747-07-03 13:25 J -23022985.10 -23022984.94 -23022984.75 0.0061 0.0019

Mercury -67747-09-29 14:37 J -23022897.05 -23022896.89 -23022896.70 0.0061 0.0014

Mercury -67747-12-26 16:04 J -23022809.01 -23022808.83 -23022808.64 0.0061 0.0009

Mercury -67746-03-24 17:30 J -23022720.95 -23022720.77 -23022720.59 0.0061 0.0003

Mercury -67746-06-20 18:42 J -23022632.90 -23022632.72 -23022632.54 0.0061 0.0002

Mercury -67746-09-16 19:54 J -23022544.85 -23022544.67 -23022544.49 0.0061 0.0008

Mercury -67746-12-13 20:52 J -23022456.79 -23022456.63 -23022456.44 0.0061 0.0014

Mercury -67745-03-10 22:18 J -23022368.74 -23022368.57 -23022368.39 0.0061 0.0018

Mercury -67745-06-06 23:45 J -23022280.68 -23022280.51 -23022280.34 0.0062 0.0024

Mercury -67745-09-03 00:42 J -23022192.61 -23022192.47 -23022192.29 0.0062 0.0030

Mercury -67745-11-30 02:09 J -23022104.55 -23022104.41 -23022104.25 0.0062 0.0035

Mercury -67744-02-26 03:35 J -23022016.48 -23022016.35 -23022016.21 0.0062 0.0040

Mercury -67744-05-25 04:33 J -23021928.41 -23021928.31 -23021928.17 0.0062 0.0046

Mercury -67744-08-21 06:13 J -23021840.34 -23021840.24 -23021840.13 0.0062 0.0051

Mercury -67744-11-17 07:11 J -23021752.25 -23021752.20 -23021752.11 0.0062 0.0057

Moon -67737-10-12 05:30 J -23019231.48 -23019231.27 -23019231.01 0.0064 0.0031

Earth -67737-10-12 08:52 J -23019231.34 -23019231.13 -23019230.88 0.0064 0.0029 \*

Earth -67736-10-13 21:35 J -23018864.69 -23018864.60 -23018864.48 0.0065 0.0059

Moon -67736-10-14 00:28 J -23018864.54 -23018864.48 -23018864.34 0.0065 0.0060 \*

Venus -67730-07-22 11:45 J -23016757.14 -23016757.01 -23016756.83 0.0067 0.0048

Venus -67729-03-03 17:45 J -23016531.97 -23016531.76 -23016531.52 0.0067 0.0013

Venus -67729-10-14 23:45 J -23016306.71 -23016306.51 -23016306.29 0.0067 0.0025

Venus -67728-05-28 05:16 J -23016081.35 -23016081.28 -23016081.16 0.0068 0.0062

Mercury -67656-09-07 18:42 J -22989680.74 -22989680.72 -22989680.68 0.0084 0.0082

Mercury -67656-12-04 20:09 J -22989592.72 -22989592.66 -22989592.57 0.0084 0.0072

Mercury -67655-03-02 21:49 J -22989504.68 -22989504.59 -22989504.49 0.0084 0.0061

Mercury -67655-05-29 23:16 J -22989416.63 -22989416.53 -22989416.41 0.0084 0.0050

Mercury -67655-08-26 00:57 J -22989328.58 -22989328.46 -22989328.33 0.0084 0.0039

Mercury -67655-11-22 02:23 J -22989240.53 -22989240.40 -22989240.26 0.0084 0.0029

Mercury -67654-02-18 04:04 J -22989152.47 -22989152.33 -22989152.20 0.0084 0.0018

Mercury -67654-05-17 05:30 J -22989064.41 -22989064.27 -22989064.13 0.0083 0.0008

Mercury -67654-08-13 06:57 J -22988976.35 -22988976.21 -22988976.07 0.0083 0.0003

Mercury -67654-11-09 08:23 J -22988888.29 -22988888.15 -22988888.01 0.0083 0.0013

Mercury -67653-02-05 09:49 J -22988800.23 -22988800.09 -22988799.96 0.0083 0.0023

Mercury -67653-05-03 11:16 J -22988712.16 -22988712.03 -22988711.91 0.0083 0.0033

Mercury -67653-07-30 12:28 J -22988624.09 -22988623.98 -22988623.86 0.0083 0.0043

Mercury -67653-10-26 13:40 J -22988536.02 -22988535.93 -22988535.81 0.0083 0.0054

Mercury -67652-01-22 15:21 J -22988447.95 -22988447.86 -22988447.77 0.0083 0.0063

Mercury -67652-04-20 16:47 J -22988359.86 -22988359.80 -22988359.74 0.0082 0.0073

Moon -67648-04-19 03:06 J -22986900.62 -22986900.37 -22986900.12 0.0080 0.0012

Earth -67648-04-19 06:13 J -22986900.50 -22986900.24 -22986899.99 0.0080 0.0008 \*

Jupiter -67646-03-11 15:49 J -22986209.23 -22986208.84 -22986208.39 0.0079 0.0050

Mars -67646-08-20 16:18 J -22986047.06 -22986046.82 -22986046.54 0.0079 0.0033

Venus -67644-12-31 23:45 J -22985182.70 -22985182.51 -22985182.30 0.0078 0.0030

Venus -67643-08-14 08:23 J -22984957.34 -22984957.15 -22984956.93 0.0077 0.0024

Venus -67642-03-27 17:01 J -22984731.82 -22984731.79 -22984731.74 0.0077 0.0075

Mercury -67502-03-15 16:47 J -22933608.85 -22933608.80 -22933608.73 0.0060 0.0057

Mercury -67502-06-11 17:45 J -22933520.83 -22933520.76 -22933520.65 0.0061 0.0052

Mercury -67502-09-07 18:57 J -22933432.80 -22933432.71 -22933432.58 0.0061 0.0047

Mercury -67502-12-04 20:09 J -22933344.77 -22933344.66 -22933344.51 0.0061 0.0042

Mercury -67501-03-01 21:21 J -22933256.74 -22933256.61 -22933256.45 0.0061 0.0037

Mercury -67501-05-28 22:33 J -22933168.70 -22933168.56 -22933168.39 0.0061 0.0032

Mercury -67501-08-24 23:45 J -22933080.65 -22933080.51 -22933080.33 0.0061 0.0027

Mercury -67501-11-21 01:25 J -22932992.61 -22932992.44 -22932992.27 0.0061 0.0021

Mercury -67500-02-17 02:23 J -22932904.56 -22932904.40 -22932904.21 0.0061 0.0016

Mercury -67500-05-16 03:49 J -22932816.52 -22932816.34 -22932816.16 0.0061 0.0011

Mercury -67500-08-12 05:01 J -22932728.47 -22932728.29 -22932728.10 0.0061 0.0006

Mercury -67500-11-08 06:28 J -22932640.42 -22932640.23 -22932640.05 0.0061 0.0001

Mercury -67499-02-04 07:25 J -22932552.36 -22932552.19 -22932552.00 0.0061 0.0006

Mercury -67499-05-03 08:37 J -22932464.31 -22932464.14 -22932463.95 0.0061 0.0011

Mercury -67499-07-30 10:04 J -22932376.25 -22932376.08 -22932375.90 0.0061 0.0016

Mercury -67499-10-26 11:30 J -22932288.19 -22932288.02 -22932287.85 0.0061 0.0021

Mercury -67498-01-22 12:28 J -22932200.13 -22932199.98 -22932199.80 0.0062 0.0027

Mercury -67498-04-20 13:54 J -22932112.07 -22932111.92 -22932111.76 0.0062 0.0032

Mercury -67498-07-17 14:52 J -22932024.01 -22932023.88 -22932023.72 0.0062 0.0038

Mercury -67498-10-13 16:18 J -22931935.94 -22931935.82 -22931935.67 0.0062 0.0043

Mercury -67497-01-09 17:16 J -22931847.86 -22931847.78 -22931847.64 0.0062 0.0049

Mercury -67497-04-06 18:57 J -22931759.78 -22931759.71 -22931759.61 0.0062 0.0054

Mercury -67497-07-03 19:54 J -22931671.69 -22931671.67 -22931671.59 0.0062 0.0060

Moon -67491-10-13 19:11 J -22929378.76 -22929378.70 -22929378.62 0.0064 0.0062

Earth -67491-10-13 20:37 J -22929378.71 -22929378.64 -22929378.57 0.0064 0.0062 \*

Moon -67490-10-15 07:25 J -22929012.43 -22929012.19 -22929011.93 0.0064 0.0024

Earth -67490-10-15 08:23 J -22929012.37 -22929012.15 -22929011.89 0.0064 0.0026 \*

Venus -67483-04-01 16:33 J -22926651.98 -22926651.81 -22926651.62 0.0067 0.0041

Venus -67483-11-12 22:33 J -22926426.78 -22926426.56 -22926426.33 0.0067 0.0005

Venus -67482-06-26 04:18 J -22926201.51 -22926201.32 -22926201.11 0.0067 0.0032

Mercury -67409-04-24 08:52 J -22899600.18 -22899600.13 -22899600.08 0.0084 0.0078

Mercury -67409-07-21 10:04 J -22899512.15 -22899512.08 -22899511.98 0.0084 0.0067

Mercury -67409-10-17 11:45 J -22899424.10 -22899424.01 -22899423.89 0.0084 0.0056

Mercury -67408-01-13 13:25 J -22899336.05 -22899335.94 -22899335.82 0.0084 0.0045

Mercury -67408-04-11 14:52 J -22899248.00 -22899247.88 -22899247.75 0.0084 0.0035

Mercury -67408-07-08 16:18 J -22899159.94 -22899159.82 -22899159.68 0.0084 0.0025

Mercury -67408-10-04 17:59 J -22899071.89 -22899071.75 -22899071.61 0.0083 0.0014

Mercury -67408-12-31 19:25 J -22898983.83 -22898983.69 -22898983.55 0.0083 0.0004

Mercury -67407-03-29 20:52 J -22898895.77 -22898895.63 -22898895.49 0.0083 0.0007

Mercury -67407-06-25 22:18 J -22898807.70 -22898807.57 -22898807.43 0.0083 0.0017

Mercury -67407-09-21 23:45 J -22898719.64 -22898719.51 -22898719.38 0.0083 0.0027

Mercury -67407-12-19 01:11 J -22898631.57 -22898631.45 -22898631.32 0.0083 0.0037

Mercury -67406-03-17 02:37 J -22898543.50 -22898543.39 -22898543.27 0.0083 0.0047

Mercury -67406-06-13 04:04 J -22898455.43 -22898455.33 -22898455.23 0.0083 0.0057

Mercury -67406-09-09 05:16 J -22898367.35 -22898367.28 -22898367.19 0.0082 0.0067

Mercury -67406-12-06 06:28 J -22898279.26 -22898279.23 -22898279.17 0.0082 0.0077

Earth -67402-04-20 07:11 J -22897048.30 -22897048.20 -22897048.04 0.0080 0.0069

Moon -67402-04-20 10:33 J -22897048.19 -22897048.06 -22897047.92 0.0080 0.0067 \*

Mars -67399-01-10 01:54 J -22896052.63 -22896052.42 -22896052.16 0.0079 0.0045

Venus -67397-01-29 20:09 J -22895302.71 -22895302.66 -22895302.58 0.0078 0.0074

Venus -67397-09-11 05:01 J -22895077.49 -22895077.29 -22895077.07 0.0077 0.0021

Venus -67396-04-24 13:54 J -22894852.12 -22894851.92 -22894851.73 0.0077 0.0033

Mercury -67256-08-03 05:01 J -22843616.32 -22843616.29 -22843616.22 0.0060 0.0058

Mercury -67256-10-30 06:13 J -22843528.31 -22843528.24 -22843528.13 0.0061 0.0053

Mercury -67255-01-26 07:25 J -22843440.28 -22843440.19 -22843440.06 0.0061 0.0048

Mercury -67255-04-24 08:37 J -22843352.25 -22843352.14 -22843352.00 0.0061 0.0043

Mercury -67255-07-21 09:49 J -22843264.22 -22843264.09 -22843263.93 0.0061 0.0038

Mercury -67255-10-17 11:01 J -22843176.18 -22843176.04 -22843175.87 0.0061 0.0033

Mercury -67254-01-13 12:13 J -22843088.14 -22843087.99 -22843087.81 0.0061 0.0028

Mercury -67254-04-11 13:40 J -22843000.09 -22842999.93 -22842999.75 0.0061 0.0022

Mercury -67254-07-08 14:52 J -22842912.05 -22842911.88 -22842911.70 0.0061 0.0017

Mercury -67254-10-04 16:04 J -22842824.00 -22842823.83 -22842823.64 0.0061 0.0012

Mercury -67254-12-31 17:16 J -22842735.95 -22842735.78 -22842735.59 0.0061 0.0007

Mercury -67253-03-28 18:42 J -22842647.90 -22842647.72 -22842647.54 0.0061 0.0001

Mercury -67253-06-24 19:54 J -22842559.85 -22842559.67 -22842559.48 0.0061 0.0004

Mercury -67253-09-20 21:06 J -22842471.80 -22842471.62 -22842471.43 0.0061 0.0009

Mercury -67253-12-17 22:18 J -22842383.74 -22842383.57 -22842383.38 0.0061 0.0015

Mercury -67252-03-15 23:45 J -22842295.68 -22842295.51 -22842295.34 0.0061 0.0020

Mercury -67252-06-12 00:42 J -22842207.62 -22842207.47 -22842207.29 0.0062 0.0026

Mercury -67252-09-08 02:09 J -22842119.56 -22842119.41 -22842119.24 0.0062 0.0031

Mercury -67252-12-05 03:06 J -22842031.49 -22842031.37 -22842031.20 0.0062 0.0037

Mercury -67251-03-03 04:33 J -22841943.43 -22841943.31 -22841943.16 0.0062 0.0042

Mercury -67251-05-30 06:13 J -22841855.35 -22841855.24 -22841855.12 0.0062 0.0047

Mercury -67251-08-26 07:11 J -22841767.28 -22841767.20 -22841767.09 0.0062 0.0053

Mercury -67251-11-22 08:52 J -22841679.19 -22841679.13 -22841679.07 0.0062 0.0058

Moon -67244-10-15 19:54 J -22839159.92 -22839159.67 -22839159.41 0.0064 0.0003

Earth -67244-10-15 23:01 J -22839159.80 -22839159.54 -22839159.28 0.0064 0.0001 \*

Venus -67237-04-29 16:33 J -22836771.84 -22836771.81 -22836771.73 0.0067 0.0065

Venus -67237-12-10 22:33 J -22836546.74 -22836546.56 -22836546.34 0.0067 0.0029

Venus -67236-07-24 05:01 J -22836321.52 -22836321.29 -22836321.07 0.0067 0.0007

Venus -67235-03-06 10:33 J -22836096.21 -22836096.06 -22836095.87 0.0068 0.0045

Mercury -67163-09-12 22:18 J -22809607.61 -22809607.57 -22809607.51 0.0084 0.0078

Mercury -67163-12-09 23:59 J -22809519.58 -22809519.50 -22809519.41 0.0084 0.0067

Mercury -67162-03-08 01:40 J -22809431.53 -22809431.43 -22809431.33 0.0084 0.0056

Mercury -67162-06-04 02:52 J -22809343.48 -22809343.38 -22809343.25 0.0084 0.0046

Mercury -67162-08-31 04:33 J -22809255.43 -22809255.31 -22809255.18 0.0084 0.0035

Mercury -67162-11-27 05:59 J -22809167.38 -22809167.25 -22809167.11 0.0084 0.0025

Mercury -67161-02-23 07:40 J -22809079.32 -22809079.18 -22809079.04 0.0084 0.0014

Mercury -67161-05-21 09:06 J -22808991.26 -22808991.12 -22808990.98 0.0083 0.0004

Mercury -67161-08-17 10:33 J -22808903.20 -22808903.06 -22808902.92 0.0083 0.0007

Mercury -67161-11-13 11:59 J -22808815.13 -22808815.00 -22808814.86 0.0083 0.0017

Mercury -67160-02-09 13:25 J -22808727.07 -22808726.94 -22808726.80 0.0083 0.0027

Mercury -67160-05-08 14:52 J -22808639.00 -22808638.88 -22808638.75 0.0083 0.0037

Mercury -67160-08-04 16:18 J -22808550.93 -22808550.82 -22808550.70 0.0083 0.0047

Mercury -67160-10-31 17:30 J -22808462.86 -22808462.77 -22808462.66 0.0083 0.0057

Mercury -67159-01-27 18:57 J -22808374.78 -22808374.71 -22808374.62 0.0082 0.0066

Mercury -67159-04-25 20:37 J -22808286.69 -22808286.64 -22808286.59 0.0082 0.0076

Earth -67155-04-22 19:54 J -22806828.86 -22806828.67 -22806828.45 0.0080 0.0048

Moon -67155-04-22 19:54 J -22806828.85 -22806828.67 -22806828.45 0.0080 0.0049 \*

Mars -67153-06-01 20:52 J -22806057.89 -22806057.63 -22806057.34 0.0079 0.0025

Venus -67151-10-10 04:47 J -22805197.44 -22805197.30 -22805197.12 0.0078 0.0053

Venus -67150-05-23 13:54 J -22804972.13 -22804971.92 -22804971.70 0.0077 0.0002

Venus -67149-01-03 22:04 J -22804746.71 -22804746.58 -22804746.41 0.0077 0.0054

Mercury -67010-09-25 17:45 J -22753711.76 -22753711.76 -22753711.72 0.0060 0.0060

Mercury -67010-12-22 18:42 J -22753623.76 -22753623.72 -22753623.62 0.0061 0.0056

Mercury -67009-03-19 19:54 J -22753535.74 -22753535.67 -22753535.54 0.0061 0.0051

Mercury -67009-06-15 21:06 J -22753447.71 -22753447.62 -22753447.47 0.0061 0.0046

Mercury -67009-09-11 22:18 J -22753359.68 -22753359.57 -22753359.41 0.0061 0.0041

Mercury -67009-12-08 23:59 J -22753271.64 -22753271.50 -22753271.35 0.0061 0.0035

Mercury -67008-03-07 01:11 J -22753183.60 -22753183.45 -22753183.29 0.0061 0.0030

Mercury -67008-06-03 02:23 J -22753095.56 -22753095.40 -22753095.23 0.0061 0.0025

Mercury -67008-08-30 03:35 J -22753007.52 -22753007.35 -22753007.17 0.0061 0.0020

Mercury -67008-11-26 04:47 J -22752919.47 -22752919.30 -22752919.12 0.0061 0.0015

Mercury -67007-02-22 06:13 J -22752831.42 -22752831.24 -22752831.06 0.0061 0.0010

Mercury -67007-05-21 07:25 J -22752743.37 -22752743.19 -22752743.01 0.0061 0.0004

Mercury -67007-08-17 08:37 J -22752655.32 -22752655.14 -22752654.96 0.0061 0.0001

Mercury -67007-11-13 09:49 J -22752567.27 -22752567.09 -22752566.91 0.0061 0.0006

Mercury -67006-02-09 11:01 J -22752479.21 -22752479.04 -22752478.86 0.0061 0.0012

Mercury -67006-05-08 12:28 J -22752391.16 -22752390.98 -22752390.81 0.0062 0.0017

Mercury -67006-08-04 13:25 J -22752303.10 -22752302.94 -22752302.76 0.0062 0.0022

Mercury -67006-10-31 14:37 J -22752215.04 -22752214.89 -22752214.71 0.0062 0.0028

Mercury -67005-01-27 16:04 J -22752126.98 -22752126.83 -22752126.67 0.0062 0.0033

Mercury -67005-04-24 17:01 J -22752038.91 -22752038.79 -22752038.63 0.0062 0.0039

Mercury -67005-07-21 18:42 J -22751950.84 -22751950.72 -22751950.59 0.0062 0.0044

Mercury -67005-10-17 19:40 J -22751862.77 -22751862.68 -22751862.55 0.0062 0.0050

Mercury -67004-01-13 21:06 J -22751774.69 -22751774.62 -22751774.53 0.0062 0.0055

Mercury -67004-04-11 22:18 J -22751686.58 -22751686.57 -22751686.52 0.0062 0.0061

# 67TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 67th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	-66998-10-17 17:45 J		-22749307.01	-22749306.76	-22749306.49	0.0064	0.0012	
Moon	-66998-10-17 20:23 J		-22749306.89	-22749306.65	-22749306.39	0.0064	0.0016	*
Venus	-66990-01-09 02:23 J		-22746666.55	-22746666.40	-22746666.20	0.0067	0.0043	
Venus	-66990-08-22 08:52 J		-22746441.35	-22746441.13	-22746440.90	0.0067	0.0007	
Venus	-66989-04-03 14:37 J		-22746216.08	-22746215.89	-22746215.67	0.0068	0.0031	
Venus	-66989-11-14 21:06 J		-22745990.62	-22745990.62	-22745990.62	0.0068	0.0068	
Mercury	-66917-11-04 11:59 J		-22719703.02	-22719703.00	-22719702.97	0.0084	0.0083	
Mercury	-66916-01-31 13:25 J		-22719615.00	-22719614.94	-22719614.85	0.0084	0.0072	
Mercury	-66916-04-29 15:06 J		-22719526.96	-22719526.87	-22719526.77	0.0084	0.0061	
Mercury	-66916-07-26 16:47 J		-22719438.91	-22719438.80	-22719438.69	0.0084	0.0050	
Mercury	-66916-10-22 18:13 J		-22719350.86	-22719350.74	-22719350.61	0.0084	0.0040	
Mercury	-66915-01-18 19:54 J		-22719262.80	-22719262.67	-22719262.54	0.0084	0.0029	
Mercury	-66915-04-16 21:21 J		-22719174.75	-22719174.61	-22719174.47	0.0084	0.0019	
Mercury	-66915-07-13 22:47 J		-22719086.69	-22719086.55	-22719086.41	0.0083	0.0008	
Mercury	-66915-10-10 00:13 J		-22718998.63	-22718998.49	-22718998.35	0.0083	0.0002	
Mercury	-66914-01-06 01:40 J		-22718910.57	-22718910.43	-22718910.29	0.0083	0.0012	
Mercury	-66914-04-04 03:06 J		-22718822.50	-22718822.37	-22718822.23	0.0083	0.0022	
Mercury	-66914-07-01 04:18 J		-22718734.44	-22718734.32	-22718734.18	0.0083	0.0033	
Mercury	-66914-09-27 05:45 J		-22718646.37	-22718646.26	-22718646.13	0.0083	0.0043	
Mercury	-66914-12-24 07:25 J		-22718558.30	-22718558.19	-22718558.08	0.0083	0.0052	
Mercury	-66913-03-21 08:52 J		-22718470.22	-22718470.13	-22718470.04	0.0083	0.0062	
Mercury	-66913-06-17 10:04 J		-22718382.14	-22718382.08	-22718382.01	0.0082	0.0072	



Mercury -66913-09-13 11:16 J -22718294.03 -22718294.03 -22718294.00 0.0082 0.0081

Earth -66909-04-23 11:16 J -22716976.27 -22716976.03 -22716975.77 0.0080 0.0020

Moon -66909-04-23 14:23 J -22716976.13 -22716975.90 -22716975.63 0.0080 0.0022 \*

Mars -66907-10-24 02:37 J -22716062.65 -22716062.39 -22716062.12 0.0079 0.0029

Venus -66905-11-07 08:37 J -22715317.18 -22715317.14 -22715317.03 0.0078 0.0073

Venus -66904-06-20 17:59 J -22715091.96 -22715091.75 -22715091.54 0.0077 0.0018

Venus -66903-02-01 02:23 J -22714866.58 -22714866.40 -22714866.19 0.0077 0.0035

Mercury -66763-02-13 07:54 J -22663719.21 -22663719.17 -22663719.09 0.0061 0.0057

Mercury -66763-05-12 09:06 J -22663631.20 -22663631.12 -22663631.01 0.0061 0.0052

Mercury -66763-08-08 10:18 J -22663543.17 -22663543.07 -22663542.94 0.0061 0.0047

Mercury -66763-11-04 11:30 J -22663455.14 -22663455.02 -22663454.88 0.0061 0.0042

Mercury -66762-01-31 12:42 J -22663367.10 -22663366.97 -22663366.81 0.0061 0.0037

Mercury -66762-04-29 13:54 J -22663279.06 -22663278.92 -22663278.75 0.0061 0.0032

Mercury -66762-07-26 15:06 J -22663191.02 -22663190.87 -22663190.69 0.0061 0.0027

Mercury -66762-10-22 16:33 J -22663102.97 -22663102.81 -22663102.64 0.0061 0.0022

Mercury -66761-01-18 17:45 J -22663014.93 -22663014.76 -22663014.58 0.0061 0.0016

Mercury -66761-04-15 18:57 J -22662926.88 -22662926.71 -22662926.53 0.0061 0.0011

Mercury -66761-07-12 20:09 J -22662838.83 -22662838.66 -22662838.47 0.0061 0.0006

Mercury -66761-10-08 21:35 J -22662750.78 -22662750.60 -22662750.42 0.0061 0.0001

Mercury -66760-01-04 22:47 J -22662662.73 -22662662.55 -22662662.37 0.0061 0.0005

Mercury -66760-04-02 23:59 J -22662574.68 -22662574.50 -22662574.32 0.0061 0.0010

Mercury -66760-06-30 01:11 J -22662486.62 -22662486.45 -22662486.27 0.0062 0.0015

Mercury -66760-09-26 02:23 J -22662398.56 -22662398.40 -22662398.22 0.0062 0.0021

Mercury -66760-12-23 03:49 J -22662310.50 -22662310.34 -22662310.17 0.0062 0.0026

Mercury -66759-03-21 04:47 J -22662222.44 -22662222.30 -22662222.13 0.0062 0.0032

Mercury -66759-06-17 06:13 J -22662134.38 -22662134.24 -22662134.08 0.0062 0.0037

Mercury -66759-09-13 07:40 J -22662046.31 -22662046.18 -22662046.04 0.0062 0.0042

Mercury -66759-12-10 08:37 J -22661958.24 -22661958.14 -22661958.01 0.0062 0.0048

Mercury -66758-03-08 10:18 J -22661870.16 -22661870.07 -22661869.97 0.0062 0.0053

Mercury -66758-06-04 11:16 J -22661782.06 -22661782.03 -22661781.96 0.0062 0.0059

Earth	-66752-10-18 14:09 J	-22659454.15	-22659453.91	-22659453.65	0.0064	0.0020
Moon	-66752-10-18 16:33 J	-22659454.06	-22659453.81	-22659453.56	0.0064	0.0023 *
Mars	-66748-08-28 12:13 J	-22658044.31	-22658043.99	-22658043.63	0.0066	0.0017
Venus	-66744-02-06 07:54 J	-22656786.28	-22656786.17	-22656786.01	0.0067	0.0054
Venus	-66744-09-19 14:09 J	-22656561.12	-22656560.91	-22656560.68	0.0067	0.0018
Venus	-66743-05-02 20:09 J	-22656335.87	-22656335.66	-22656335.44	0.0068	0.0020
Venus	-66743-12-14 01:54 J	-22656110.52	-22656110.42	-22656110.28	0.0068	0.0057
Mercury	-66671-12-28 02:23 J	-22629798.40	-22629798.40	-22629798.36	0.0084	0.0084
Mercury	-66670-03-26 04:04 J	-22629710.39	-22629710.33	-22629710.25	0.0084	0.0072
Mercury	-66670-06-22 05:45 J	-22629622.35	-22629622.26	-22629622.16	0.0084	0.0062
Mercury	-66670-09-18 07:11 J	-22629534.30	-22629534.20	-22629534.08	0.0084	0.0051
Mercury	-66670-12-15 08:52 J	-22629446.25	-22629446.13	-22629446.01	0.0084	0.0040
Mercury	-66669-03-12 10:18 J	-22629358.20	-22629358.07	-22629357.93	0.0084	0.0030
Mercury	-66669-06-08 11:45 J	-22629270.14	-22629270.01	-22629269.87	0.0084	0.0020
Mercury	-66669-09-04 13:11 J	-22629182.08	-22629181.95	-22629181.80	0.0083	0.0010
Mercury	-66669-12-01 14:52 J	-22629094.02	-22629093.88	-22629093.74	0.0083	0.0001
Mercury	-66668-02-27 16:18 J	-22629005.96	-22629005.82	-22629005.68	0.0083	0.0012
Mercury	-66668-05-26 17:30 J	-22628917.89	-22628917.77	-22628917.63	0.0083	0.0022
Mercury	-66668-08-22 18:57 J	-22628829.83	-22628829.71	-22628829.57	0.0083	0.0032
Mercury	-66668-11-18 20:23 J	-22628741.76	-22628741.65	-22628741.52	0.0083	0.0042
Mercury	-66667-02-14 21:49 J	-22628653.69	-22628653.59	-22628653.47	0.0083	0.0052
Mercury	-66667-05-13 23:01 J	-22628565.62	-22628565.54	-22628565.43	0.0083	0.0062
Mercury	-66667-08-10 00:42 J	-22628477.53	-22628477.47	-22628477.40	0.0082	0.0071
Mercury	-66667-11-06 01:54 J	-22628389.43	-22628389.42	-22628389.38	0.0082	0.0081
Moon	-66663-04-25 04:04 J	-22627123.59	-22627123.33	-22627123.06	0.0080	0.0011
Earth	-66663-04-25 06:13 J	-22627123.49	-22627123.24	-22627122.98	0.0080	0.0007 *
Venus	-66658-07-20 00:13 J	-22625211.68	-22625211.49	-22625211.28	0.0077	0.0029
Venus	-66657-03-01 09:06 J	-22624986.32	-22624986.12	-22624985.91	0.0077	0.0024
Venus	-66657-10-12 17:16 J	-22624760.78	-22624760.78	-22624760.75	0.0077	0.0077
Mercury	-66517-01-09 20:52 J	-22573902.63	-22573902.63	-22573902.60	0.0061	0.0060

Mercury -66517-04-06 21:49 J -22573814.64 -22573814.59 -22573814.50 0.0061 0.0056

Mercury -66517-07-03 23:01 J -22573726.62 -22573726.54 -22573726.42 0.0061 0.0051

Mercury -66517-09-30 00:13 J -22573638.59 -22573638.49 -22573638.35 0.0061 0.0046

Mercury -66517-12-27 01:25 J -22573550.55 -22573550.44 -22573550.29 0.0061 0.0041

Mercury -66516-03-25 02:37 J -22573462.52 -22573462.39 -22573462.22 0.0061 0.0036

Mercury -66516-06-21 03:49 J -22573374.48 -22573374.34 -22573374.16 0.0061 0.0031

Mercury -66516-09-17 05:30 J -22573286.43 -22573286.27 -22573286.11 0.0061 0.0025

Mercury -66516-12-14 06:28 J -22573198.39 -22573198.23 -22573198.05 0.0061 0.0021

Mercury -66515-03-12 07:40 J -22573110.34 -22573110.18 -22573109.99 0.0061 0.0016

Mercury -66515-06-08 09:06 J -22573022.30 -22573022.12 -22573021.94 0.0061 0.0010

Mercury -66515-09-04 10:18 J -22572934.25 -22572934.07 -22572933.88 0.0061 0.0005

Mercury -66515-12-01 11:45 J -22572846.20 -22572846.01 -22572845.83 0.0061 0.0001

Mercury -66514-02-27 12:57 J -22572758.14 -22572757.96 -22572757.78 0.0061 0.0006

Mercury -66514-05-26 14:09 J -22572670.09 -22572669.91 -22572669.73 0.0061 0.0011

Mercury -66514-08-22 15:06 J -22572582.03 -22572581.87 -22572581.68 0.0062 0.0017

Mercury -66514-11-18 16:33 J -22572493.97 -22572493.81 -22572493.63 0.0062 0.0022

Mercury -66513-02-14 17:59 J -22572405.91 -22572405.75 -22572405.59 0.0062 0.0027

Mercury -66513-05-12 18:57 J -22572317.85 -22572317.71 -22572317.54 0.0062 0.0033

Mercury -66513-08-08 20:23 J -22572229.78 -22572229.65 -22572229.50 0.0062 0.0038

Mercury -66513-11-04 21:49 J -22572141.72 -22572141.59 -22572141.46 0.0062 0.0043

Mercury -66512-01-31 22:47 J -22572053.64 -22572053.55 -22572053.42 0.0062 0.0049

Mercury -66512-04-30 00:28 J -22571965.56 -22571965.48 -22571965.39 0.0062 0.0054

Mercury -66512-07-27 01:25 J -22571877.46 -22571877.44 -22571877.38 0.0062 0.0060

Moon -66506-10-20 11:16 J -22569601.26 -22569601.03 -22569600.76 0.0064 0.0020

Earth -66506-10-20 15:06 J -22569601.12 -22569600.87 -22569600.62 0.0064 0.0016 \*

Mars -66501-01-19 12:42 J -22568049.12 -22568048.97 -22568048.78 0.0066 0.0057

Venus -66498-03-07 16:04 J -22566905.92 -22566905.83 -22566905.69 0.0067 0.0057

Venus -66498-10-18 22:18 J -22566680.78 -22566680.57 -22566680.35 0.0067 0.0021

Venus -66497-05-31 04:18 J -22566455.53 -22566455.32 -22566455.10 0.0068 0.0017

Venus -66496-01-11 10:18 J -22566230.20 -22566230.07 -22566229.93 0.0068 0.0054

Mercury -66424-02-18 17:45 J -22539893.79 -22539893.76 -22539893.69 0.0084 0.0079

Mercury -66424-05-17 19:25 J -22539805.76 -22539805.69 -22539805.60 0.0084 0.0068

Mercury -66424-08-13 21:06 J -22539717.71 -22539717.62 -22539717.51 0.0084 0.0057

Mercury -66424-11-09 22:33 J -22539629.67 -22539629.56 -22539629.43 0.0084 0.0047

Mercury -66423-02-06 00:13 J -22539541.61 -22539541.49 -22539541.36 0.0084 0.0036

Mercury -66423-05-05 01:40 J -22539453.56 -22539453.43 -22539453.29 0.0084 0.0026

Mercury -66423-08-01 03:21 J -22539365.50 -22539365.36 -22539365.22 0.0083 0.0015

Mercury -66423-10-28 04:47 J -22539277.44 -22539277.30 -22539277.16 0.0083 0.0005

Mercury -66422-01-24 06:13 J -22539189.38 -22539189.24 -22539189.10 0.0083 0.0005

Mercury -66422-04-22 07:40 J -22539101.31 -22539101.18 -22539101.04 0.0083 0.0015

Mercury -66422-07-19 09:06 J -22539013.25 -22539013.12 -22539012.98 0.0083 0.0025

Mercury -66422-10-15 10:33 J -22538925.18 -22538925.06 -22538924.93 0.0083 0.0035

Mercury -66421-01-11 11:59 J -22538837.11 -22538837.00 -22538836.88 0.0083 0.0045

Mercury -66421-04-08 13:25 J -22538749.04 -22538748.94 -22538748.84 0.0083 0.0055

Mercury -66421-07-05 14:37 J -22538660.97 -22538660.89 -22538660.80 0.0082 0.0065

Mercury -66421-10-01 15:49 J -22538572.88 -22538572.84 -22538572.76 0.0082 0.0075

Moon -66417-04-26 03:21 J -22537270.61 -22537270.36 -22537270.11 0.0080 0.0015

Earth -66417-04-26 05:45 J -22537270.51 -22537270.26 -22537270.00 0.0080 0.0011 \*

Venus -66412-08-17 09:21 J -22535331.30 -22535331.11 -22535330.90 0.0077 0.0032

Venus -66411-03-30 17:59 J -22535105.95 -22535105.75 -22535105.53 0.0077 0.0022

Venus -66411-11-11 02:23 J -22534880.44 -22534880.40 -22534880.33 0.0077 0.0074

Mercury -66271-03-03 11:30 J -22483998.06 -22483998.02 -22483997.99 0.0061 0.0059

Mercury -66271-05-30 11:59 J -22483910.05 -22483910.00 -22483909.90 0.0061 0.0055

Mercury -66271-08-26 13:11 J -22483822.03 -22483821.95 -22483821.82 0.0061 0.0050

Mercury -66271-11-22 14:23 J -22483734.00 -22483733.90 -22483733.76 0.0061 0.0045

Mercury -66270-02-18 16:04 J -22483645.97 -22483645.83 -22483645.69 0.0061 0.0039

Mercury -66270-05-17 17:16 J -22483557.93 -22483557.78 -22483557.63 0.0061 0.0034

Mercury -66270-08-13 18:13 J -22483469.89 -22483469.74 -22483469.57 0.0061 0.0029

Mercury -66270-11-09 19:25 J -22483381.85 -22483381.69 -22483381.51 0.0061 0.0024

Mercury -66269-02-05 20:37 J -22483293.80 -22483293.64 -22483293.46 0.0061 0.0019

Mercury -66269-05-03 21:49 J -22483205.76 -22483205.59 -22483205.40 0.0061 0.0014

Mercury -66269-07-30 23:01 J -22483117.71 -22483117.54 -22483117.35 0.0061 0.0010

Mercury -66269-10-27 00:28 J -22483029.66 -22483029.48 -22483029.30 0.0061 0.0004

Mercury -66268-01-23 01:40 J -22482941.61 -22482941.43 -22482941.24 0.0061 0.0002

Mercury -66268-04-21 02:52 J -22482853.56 -22482853.38 -22482853.19 0.0061 0.0007

Mercury -66268-07-18 04:04 J -22482765.50 -22482765.33 -22482765.14 0.0062 0.0012

Mercury -66268-10-14 05:16 J -22482677.44 -22482677.28 -22482677.09 0.0062 0.0018

Mercury -66267-01-10 06:42 J -22482589.39 -22482589.22 -22482589.05 0.0062 0.0023

Mercury -66267-04-08 07:40 J -22482501.32 -22482501.18 -22482501.00 0.0062 0.0029

Mercury -66267-07-05 09:06 J -22482413.26 -22482413.12 -22482412.96 0.0062 0.0034

Mercury -66267-10-01 10:33 J -22482325.20 -22482325.06 -22482324.91 0.0062 0.0039

Mercury -66267-12-28 11:30 J -22482237.13 -22482237.02 -22482236.88 0.0062 0.0045

Mercury -66266-03-26 12:57 J -22482149.05 -22482148.96 -22482148.84 0.0062 0.0050

Mercury -66266-06-22 13:54 J -22482060.97 -22482060.92 -22482060.81 0.0062 0.0057

Mercury -66266-09-18 15:35 J -22481972.86 -22481972.85 -22481972.81 0.0062 0.0062

Moon -66260-10-21 14:52 J -22479748.11 -22479747.88 -22479747.62 0.0064 0.0014

Earth -66260-10-21 15:35 J -22479748.10 -22479747.85 -22479747.59 0.0064 0.0012 \*

Venus -66252-04-04 23:59 J -22477025.57 -22477025.50 -22477025.37 0.0067 0.0060

Venus -66252-11-16 06:13 J -22476800.44 -22476800.24 -22476800.02 0.0067 0.0023

Venus -66251-06-29 12:28 J -22476575.20 -22476574.98 -22476574.76 0.0068 0.0014

Venus -66250-02-09 17:59 J -22476349.87 -22476349.75 -22476349.58 0.0068 0.0052

Mercury -66178-04-13 09:49 J -22449989.16 -22449989.09 -22449989.03 0.0084 0.0074

Mercury -66178-07-10 11:01 J -22449901.12 -22449901.04 -22449900.93 0.0084 0.0063

Mercury -66178-10-06 12:42 J -22449813.07 -22449812.97 -22449812.85 0.0084 0.0052

Mercury -66177-01-02 14:09 J -22449725.02 -22449724.91 -22449724.78 0.0084 0.0042

Mercury -66177-03-30 15:49 J -22449636.97 -22449636.84 -22449636.71 0.0084 0.0031

Mercury -66177-06-26 17:30 J -22449548.91 -22449548.77 -22449548.64 0.0084 0.0021

Mercury -66177-09-22 18:57 J -22449460.85 -22449460.71 -22449460.57 0.0083 0.0010

Mercury -66177-12-19 20:23 J -22449372.79 -22449372.65 -22449372.51 0.0083 0.0001

Mercury -66176-03-17 21:49 J -22449284.73 -22449284.59 -22449284.45 0.0083 0.0010

Mercury -66176-06-13 23:16 J -22449196.66 -22449196.53 -22449196.39 0.0083 0.0020

Mercury -66176-09-10 00:42 J -22449108.60 -22449108.47 -22449108.34 0.0083 0.0030

Mercury -66176-12-07 02:09 J -22449020.53 -22449020.41 -22449020.28 0.0083 0.0040

Mercury -66175-03-05 03:35 J -22448932.46 -22448932.35 -22448932.24 0.0083 0.0050

Mercury -66175-06-01 04:47 J -22448844.38 -22448844.30 -22448844.19 0.0083 0.0060

Mercury -66175-08-28 06:28 J -22448756.30 -22448756.23 -22448756.15 0.0082 0.0069

Mercury -66175-11-24 07:40 J -22448668.21 -22448668.18 -22448668.13 0.0082 0.0079

Earth -66171-04-28 06:57 J -22447417.45 -22447417.21 -22447416.95 0.0080 0.0019

Moon -66171-04-28 09:49 J -22447417.32 -22447417.09 -22447416.84 0.0080 0.0024 \*

Venus -66166-09-15 19:11 J -22445450.89 -22445450.70 -22445450.50 0.0077 0.0031

Venus -66165-04-28 03:35 J -22445225.55 -22445225.35 -22445225.13 0.0077 0.0023

Venus -66165-12-09 11:59 J -22445000.03 -22445000.00 -22444999.95 0.0077 0.0075

Mercury -66025-01-28 00:57 J -22394181.46 -22394181.46 -22394181.42 0.0061 0.0060

Mercury -66025-04-25 01:54 J -22394093.47 -22394093.42 -22394093.32 0.0061 0.0056

Mercury -66025-07-22 03:06 J -22394005.44 -22394005.37 -22394005.25 0.0061 0.0051

Mercury -66025-10-18 04:18 J -22393917.41 -22393917.32 -22393917.18 0.0061 0.0046

Mercury -66024-01-14 05:30 J -22393829.38 -22393829.27 -22393829.11 0.0061 0.0041

Mercury -66024-04-12 06:42 J -22393741.34 -22393741.22 -22393741.05 0.0061 0.0036

Mercury -66024-07-09 07:54 J -22393653.30 -22393653.17 -22393652.99 0.0061 0.0031

Mercury -66024-10-05 09:35 J -22393565.26 -22393565.10 -22393564.93 0.0061 0.0026

Mercury -66023-01-01 10:47 J -22393477.22 -22393477.05 -22393476.88 0.0061 0.0020

Mercury -66023-03-30 11:59 J -22393389.17 -22393389.00 -22393388.82 0.0061 0.0015

Mercury -66023-06-26 13:11 J -22393301.13 -22393300.95 -22393300.77 0.0061 0.0010

Mercury -66023-09-22 14:23 J -22393213.08 -22393212.90 -22393212.72 0.0061 0.0005

Mercury -66023-12-19 15:35 J -22393125.03 -22393124.85 -22393124.66 0.0061 0.0002

Mercury -66022-03-17 16:47 J -22393036.97 -22393036.80 -22393036.61 0.0061 0.0006

Mercury -66022-06-13 18:13 J -22392948.92 -22392948.74 -22392948.56 0.0062 0.0011

Mercury -66022-09-09 19:25 J -22392860.86 -22392860.69 -22392860.51 0.0062 0.0016

Mercury -66022-12-06 20:23 J -22392772.81 -22392772.65 -22392772.47 0.0062 0.0022

Mercury -66021-03-03 21:49 J -22392684.75 -22392684.59 -22392684.42 0.0062 0.0027

Mercury	-66021-05-30 23:01 J	-22392596.69	-22392596.54	-22392596.38	0.0062	0.0032
Mercury	-66021-08-26 23:59 J	-22392508.62	-22392508.50	-22392508.33	0.0062	0.0038
Mercury	-66021-11-23 01:25 J	-22392420.55	-22392420.44	-22392420.29	0.0062	0.0043
Mercury	-66020-02-19 02:37 J	-22392332.48	-22392332.39	-22392332.26	0.0062	0.0049
Mercury	-66020-05-18 04:04 J	-22392244.40	-22392244.33	-22392244.23	0.0062	0.0054
Mercury	-66020-08-14 05:01 J	-22392156.31	-22392156.29	-22392156.21	0.0062	0.0061
Earth	-66014-10-23 20:09 J	-22389894.92	-22389894.66	-22389894.39	0.0064	0.0003
Moon	-66014-10-23 23:45 J	-22389894.77	-22389894.51	-22389894.25	0.0064	0.0001 *
Venus	-66006-05-04 10:47 J	-22387145.15	-22387145.05	-22387144.90	0.0067	0.0056
Venus	-66006-12-15 17:01 J	-22386920.00	-22386919.79	-22386919.57	0.0067	0.0019
Venus	-66005-07-27 23:16 J	-22386694.75	-22386694.53	-22386694.31	0.0068	0.0019
Venus	-66004-03-10 05:01 J	-22386469.39	-22386469.29	-22386469.15	0.0068	0.0057

# 66TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 66th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-65932-03-09 00:42 J	-22360172.52	-22360172.47	-22360172.40	0.0084	0.0075		
Mercury	-65932-06-05 02:23 J	-22360084.49	-22360084.40	-22360084.31	0.0084	0.0064		
Mercury	-65932-09-01 03:49 J	-22359996.44	-22359996.34	-22359996.23	0.0084	0.0054		
Mercury	-65932-11-28 05:30 J	-22359908.39	-22359908.27	-22359908.15	0.0084	0.0043		
Mercury	-65931-02-24 06:57 J	-22359820.33	-22359820.21	-22359820.08	0.0084	0.0033		
Mercury	-65931-05-23 08:23 J	-22359732.28	-22359732.15	-22359732.01	0.0084	0.0023		

Mercury -65931-08-19 10:04 J -22359644.22 -22359644.08 -22359643.94 0.0083 0.0012

Mercury -65931-11-15 11:30 J -22359556.16 -22359556.02 -22359555.88 0.0083 0.0002

Mercury -65930-02-11 12:57 J -22359468.10 -22359467.96 -22359467.82 0.0083 0.0009

Mercury -65930-05-10 14:23 J -22359380.03 -22359379.90 -22359379.76 0.0083 0.0019

Mercury -65930-08-06 15:49 J -22359291.97 -22359291.84 -22359291.71 0.0083 0.0029

Mercury -65930-11-02 17:01 J -22359203.90 -22359203.79 -22359203.65 0.0083 0.0039

Mercury -65929-01-29 18:42 J -22359115.83 -22359115.72 -22359115.60 0.0083 0.0048

Mercury -65929-04-26 20:09 J -22359027.76 -22359027.66 -22359027.56 0.0083 0.0058

Mercury -65929-07-23 21:21 J -22358939.68 -22358939.61 -22358939.52 0.0082 0.0068

Mercury -65929-10-19 22:33 J -22358851.59 -22358851.56 -22358851.50 0.0082 0.0078

Earth -65925-04-29 12:13 J -22357564.18 -22357563.99 -22357563.75 0.0080 0.0044

Moon -65925-04-29 14:23 J -22357564.10 -22357563.90 -22357563.67 0.0080 0.0047 \*

Mars -65923-06-30 22:47 J -22356771.84 -22356771.55 -22356771.26 0.0079 0.0001

Venus -65920-03-02 22:04 J -22355795.59 -22355795.58 -22355795.51 0.0078 0.0077

Venus -65920-10-14 07:11 J -22355570.40 -22355570.20 -22355569.98 0.0077 0.0022

Venus -65919-05-27 15:49 J -22355345.03 -22355344.84 -22355344.64 0.0077 0.0031

Mercury -65779-03-21 15:49 J -22304276.88 -22304276.84 -22304276.75 0.0061 0.0057

Mercury -65779-06-17 17:01 J -22304188.86 -22304188.79 -22304188.68 0.0061 0.0052

Mercury -65779-09-13 18:13 J -22304100.83 -22304100.74 -22304100.61 0.0061 0.0047

Mercury -65779-12-10 19:25 J -22304012.80 -22304012.69 -22304012.54 0.0061 0.0042

Mercury -65778-03-08 20:52 J -22303924.76 -22303924.63 -22303924.48 0.0061 0.0037

Mercury -65778-06-04 22:04 J -22303836.72 -22303836.58 -22303836.42 0.0061 0.0032

Mercury -65778-08-31 23:16 J -22303748.68 -22303748.53 -22303748.36 0.0061 0.0027

Mercury -65778-11-28 00:28 J -22303660.64 -22303660.48 -22303660.30 0.0061 0.0022

Mercury -65777-02-24 01:40 J -22303572.59 -22303572.43 -22303572.25 0.0061 0.0017

Mercury -65777-05-22 03:06 J -22303484.55 -22303484.37 -22303484.19 0.0061 0.0012

Mercury -65777-08-18 04:18 J -22303396.50 -22303396.32 -22303396.14 0.0061 0.0007

Mercury -65777-11-14 05:30 J -22303308.45 -22303308.27 -22303308.09 0.0061 0.0002

Mercury -65776-02-10 06:42 J -22303220.40 -22303220.22 -22303220.03 0.0061 0.0004

Mercury -65776-05-09 07:54 J -22303132.34 -22303132.17 -22303131.98 0.0062 0.0009



Mercury -65776-08-05 09:06 J -22303044.29 -22303044.12 -22303043.93 0.0062 0.0015

Mercury -65776-11-01 10:18 J -22302956.23 -22302956.07 -22302955.89 0.0062 0.0020

Mercury -65775-01-28 11:45 J -22302868.17 -22302868.01 -22302867.84 0.0062 0.0025

Mercury -65775-04-26 12:42 J -22302780.11 -22302779.97 -22302779.79 0.0062 0.0031

Mercury -65775-07-23 14:09 J -22302692.05 -22302691.91 -22302691.75 0.0062 0.0036

Mercury -65775-10-19 15:35 J -22302603.98 -22302603.85 -22302603.71 0.0062 0.0041

Mercury -65774-01-15 16:33 J -22302515.91 -22302515.81 -22302515.67 0.0062 0.0047

Mercury -65774-04-13 17:59 J -22302427.83 -22302427.75 -22302427.64 0.0062 0.0052

Mercury -65774-07-10 18:57 J -22302339.74 -22302339.71 -22302339.62 0.0062 0.0059

Moon -65768-10-24 23:16 J -22300041.79 -22300041.53 -22300041.26 0.0064 0.0016

Earth -65768-10-24 23:59 J -22300041.74 -22300041.50 -22300041.24 0.0064 0.0017 \*

Mars -65764-05-02 17:45 J -22298756.09 -22298755.76 -22298755.41 0.0066 0.0009

Venus -65760-06-01 21:06 J -22297264.74 -22297264.62 -22297264.45 0.0067 0.0052

Venus -65759-01-13 03:21 J -22297039.57 -22297039.36 -22297039.13 0.0068 0.0014

Venus -65759-08-26 09:21 J -22296814.31 -22296814.11 -22296813.88 0.0068 0.0024

Venus -65758-04-08 15:06 J -22296588.93 -22296588.87 -22296588.75 0.0068 0.0062

Mercury -65686-02-02 15:49 J -22270355.89 -22270355.84 -22270355.78 0.0084 0.0077

Mercury -65686-05-01 17:16 J -22270267.86 -22270267.78 -22270267.68 0.0084 0.0066

Mercury -65686-07-28 18:57 J -22270179.81 -22270179.71 -22270179.60 0.0084 0.0055

Mercury -65686-10-24 20:23 J -22270091.76 -22270091.65 -22270091.52 0.0084 0.0045

Mercury -65685-01-20 22:04 J -22270003.71 -22270003.58 -22270003.45 0.0084 0.0034

Mercury -65685-04-17 23:30 J -22269915.65 -22269915.52 -22269915.38 0.0084 0.0024

Mercury -65685-07-15 01:11 J -22269827.59 -22269827.45 -22269827.31 0.0083 0.0014

Mercury -65685-10-11 02:37 J -22269739.53 -22269739.39 -22269739.25 0.0083 0.0003

Mercury -65684-01-07 04:04 J -22269651.47 -22269651.33 -22269651.19 0.0083 0.0007

Mercury -65684-04-05 05:30 J -22269563.41 -22269563.27 -22269563.13 0.0083 0.0017

Mercury -65684-07-02 06:57 J -22269475.34 -22269475.21 -22269475.08 0.0083 0.0027

Mercury -65684-09-28 08:23 J -22269387.27 -22269387.15 -22269387.02 0.0083 0.0037

Mercury -65684-12-25 09:35 J -22269299.20 -22269299.10 -22269298.97 0.0083 0.0047

Mercury -65683-03-23 11:01 J -22269211.13 -22269211.04 -22269210.93 0.0083 0.0057

Mercury -65683-06-19 12:42 J -22269123.05 -22269122.97 -22269122.89 0.0082 0.0066

Mercury -65683-09-15 13:54 J -22269034.97 -22269034.92 -22269034.86 0.0082 0.0075

Moon -65679-05-01 14:23 J -22267711.01 -22267710.90 -22267710.77 0.0080 0.0071

Earth -65679-05-01 17:16 J -22267710.89 -22267710.78 -22267710.61 0.0080 0.0068 \*

Venus -65674-04-01 10:33 J -22265915.14 -22265915.06 -22265914.93 0.0078 0.0068

Venus -65674-11-12 19:40 J -22265689.89 -22265689.68 -22265689.46 0.0077 0.0013

Venus -65673-06-25 04:18 J -22265464.51 -22265464.32 -22265464.14 0.0077 0.0040

Mercury -65534-11-19 05:59 J -22214548.25 -22214548.25 -22214548.24 0.0061 0.0061

Mercury -65533-02-15 06:42 J -22214460.27 -22214460.22 -22214460.13 0.0061 0.0056

Mercury -65533-05-13 07:54 J -22214372.25 -22214372.17 -22214372.05 0.0061 0.0051

Mercury -65533-08-09 09:06 J -22214284.22 -22214284.12 -22214283.99 0.0061 0.0046

Mercury -65533-11-05 10:18 J -22214196.19 -22214196.07 -22214195.92 0.0061 0.0041

Mercury -65532-02-01 11:30 J -22214108.15 -22214108.02 -22214107.86 0.0061 0.0036

Mercury -65532-04-30 12:42 J -22214020.11 -22214019.97 -22214019.80 0.0061 0.0031

Mercury -65532-07-27 13:54 J -22213932.07 -22213931.92 -22213931.74 0.0061 0.0026

Mercury -65532-10-23 15:06 J -22213844.02 -22213843.87 -22213843.68 0.0061 0.0022

Mercury -65531-01-19 16:18 J -22213755.98 -22213755.82 -22213755.63 0.0061 0.0017

Mercury -65531-04-17 17:59 J -22213667.93 -22213667.75 -22213667.57 0.0061 0.0011

Mercury -65531-07-14 19:11 J -22213579.88 -22213579.70 -22213579.52 0.0061 0.0006

Mercury -65531-10-10 20:23 J -22213491.83 -22213491.65 -22213491.47 0.0061 0.0000

Mercury -65530-01-06 21:35 J -22213403.78 -22213403.60 -22213403.42 0.0062 0.0005

Mercury -65530-04-04 22:33 J -22213315.73 -22213315.56 -22213315.37 0.0062 0.0011

Mercury -65530-07-01 23:59 J -22213227.67 -22213227.50 -22213227.32 0.0062 0.0016

Mercury -65530-09-28 01:11 J -22213139.61 -22213139.45 -22213139.27 0.0062 0.0021

Mercury -65530-12-25 02:37 J -22213051.55 -22213051.39 -22213051.22 0.0062 0.0026

Mercury -65529-03-22 03:35 J -22212963.49 -22212963.35 -22212963.18 0.0062 0.0032

Mercury -65529-06-18 04:47 J -22212875.43 -22212875.30 -22212875.13 0.0062 0.0037

Mercury -65529-09-14 06:13 J -22212787.36 -22212787.24 -22212787.09 0.0062 0.0043

Mercury -65529-12-11 07:25 J -22212699.29 -22212699.19 -22212699.06 0.0062 0.0048

Mercury -65528-03-09 08:52 J -22212611.21 -22212611.13 -22212611.03 0.0062 0.0053

Mercury -65528-06-05 09:49 J -22212523.12 -22212523.09 -22212523.01 0.0062 0.0059  
 Earth -65523-10-25 19:11 J -22210554.86 -22210554.70 -22210554.49 0.0064 0.0045  
 Moon -65523-10-25 23:01 J -22210554.71 -22210554.54 -22210554.33 0.0064 0.0044 \*  
 Moon -65522-10-27 04:33 J -22210188.49 -22210188.31 -22210188.10 0.0064 0.0041  
 Earth -65522-10-27 07:40 J -22210188.37 -22210188.18 -22210187.96 0.0064 0.0041 \*  
 Venus -65514-07-01 10:33 J -22207384.22 -22207384.06 -22207383.86 0.0067 0.0040  
 Venus -65513-02-11 17:01 J -22207159.02 -22207158.79 -22207158.56 0.0068 0.0002  
 Venus -65513-09-23 22:47 J -22206933.72 -22206933.55 -22206933.34 0.0068 0.0036  
 Mercury -65441-10-02 06:13 J -22180627.25 -22180627.24 -22180627.21 0.0084 0.0083  
 Mercury -65441-12-29 07:54 J -22180539.23 -22180539.17 -22180539.09 0.0084 0.0073  
 Mercury -65440-03-27 09:21 J -22180451.19 -22180451.11 -22180451.00 0.0084 0.0062  
 Mercury -65440-06-23 11:16 J -22180363.14 -22180363.03 -22180362.92 0.0084 0.0051  
 Mercury -65440-09-19 12:42 J -22180275.09 -22180274.97 -22180274.84 0.0084 0.0041  
 Mercury -65440-12-16 14:09 J -22180187.03 -22180186.91 -22180186.77 0.0084 0.0031  
 Mercury -65439-03-14 15:35 J -22180098.98 -22180098.85 -22180098.70 0.0083 0.0021  
 Mercury -65439-06-10 17:16 J -22180010.92 -22180010.78 -22180010.64 0.0083 0.0010  
 Mercury -65439-09-06 18:42 J -22179922.86 -22179922.72 -22179922.57 0.0083 0.0003  
 Mercury -65439-12-03 20:23 J -22179834.79 -22179834.65 -22179834.51 0.0083 0.0011  
 Mercury -65438-03-01 21:49 J -22179746.73 -22179746.59 -22179746.46 0.0083 0.0020  
 Mercury -65438-05-28 23:16 J -22179658.66 -22179658.53 -22179658.40 0.0083 0.0030  
 Mercury -65438-08-25 00:42 J -22179570.59 -22179570.47 -22179570.35 0.0083 0.0040  
 Mercury -65438-11-21 01:54 J -22179482.52 -22179482.42 -22179482.30 0.0083 0.0050  
 Mercury -65437-02-17 03:21 J -22179394.45 -22179394.36 -22179394.26 0.0082 0.0059  
 Mercury -65437-05-15 04:33 J -22179306.37 -22179306.31 -22179306.22 0.0082 0.0069  
 Mercury -65437-08-11 05:59 J -22179218.28 -22179218.25 -22179218.20 0.0082 0.0079  
 Earth -65434-05-01 23:45 J -22178224.66 -22178224.51 -22178224.30 0.0081 0.0059  
 Moon -65434-05-02 02:09 J -22178224.57 -22178224.41 -22178224.22 0.0081 0.0061 \*  
 Venus -65428-04-30 01:54 J -22176034.58 -22176034.42 -22176034.24 0.0077 0.0048  
 Venus -65428-12-11 10:47 J -22175809.27 -22175809.05 -22175808.84 0.0077 0.0006  
 Venus -65427-07-24 18:57 J -22175583.84 -22175583.71 -22175583.56 0.0077 0.0059

Mercury -65288-10-14 20:23 J -22124731.66 -22124731.65 -22124731.61 0.0061 0.0060

Mercury -65287-01-10 21:49 J -22124643.66 -22124643.59 -22124643.51 0.0061 0.0055

Mercury -65287-04-08 23:01 J -22124555.64 -22124555.54 -22124555.44 0.0061 0.0050

Mercury -65287-07-06 00:13 J -22124467.61 -22124467.49 -22124467.37 0.0061 0.0045

Mercury -65287-10-02 01:25 J -22124379.57 -22124379.44 -22124379.31 0.0061 0.0040

Mercury -65287-12-29 02:37 J -22124291.54 -22124291.39 -22124291.25 0.0061 0.0035

Mercury -65286-03-27 03:35 J -22124203.50 -22124203.35 -22124203.19 0.0061 0.0031

Mercury -65286-06-23 04:47 J -22124115.46 -22124115.30 -22124115.13 0.0061 0.0026

Mercury -65286-09-19 05:59 J -22124027.41 -22124027.25 -22124027.07 0.0061 0.0020

Mercury -65286-12-16 07:11 J -22123939.37 -22123939.20 -22123939.02 0.0061 0.0015

Mercury -65285-03-13 08:23 J -22123851.32 -22123851.15 -22123850.96 0.0061 0.0010

Mercury -65285-06-09 09:35 J -22123763.27 -22123763.10 -22123762.91 0.0061 0.0006

Mercury -65285-09-05 11:01 J -22123675.22 -22123675.04 -22123674.86 0.0061 0.0000

Mercury -65285-12-02 12:13 J -22123587.17 -22123586.99 -22123586.81 0.0062 0.0005

Mercury -65284-02-28 13:25 J -22123499.12 -22123498.94 -22123498.76 0.0062 0.0011

Mercury -65284-05-27 14:37 J -22123411.06 -22123410.89 -22123410.71 0.0062 0.0016

Mercury -65284-08-23 15:35 J -22123323.00 -22123322.85 -22123322.66 0.0062 0.0022

Mercury -65284-11-19 17:01 J -22123234.94 -22123234.79 -22123234.62 0.0062 0.0027

Mercury -65283-02-15 18:13 J -22123146.88 -22123146.74 -22123146.57 0.0062 0.0032

Mercury -65283-05-14 19:40 J -22123058.82 -22123058.68 -22123058.53 0.0062 0.0037

Mercury -65283-08-10 20:37 J -22122970.75 -22122970.64 -22122970.49 0.0062 0.0043

Mercury -65283-11-06 22:04 J -22122882.68 -22122882.58 -22122882.45 0.0062 0.0049

Mercury -65282-02-02 23:01 J -22122794.60 -22122794.54 -22122794.42 0.0062 0.0055

Mercury -65282-05-02 00:42 J -22122706.51 -22122706.47 -22122706.40 0.0062 0.0060

Earth -65277-10-27 02:37 J -22120701.61 -22120701.39 -22120701.13 0.0064 0.0024

Moon -65277-10-27 02:52 J -22120701.61 -22120701.38 -22120701.11 0.0064 0.0023 \*

Earth -65276-10-28 14:52 J -22120334.92 -22120334.88 -22120334.81 0.0064 0.0063

Moon -65276-10-28 16:47 J -22120334.82 -22120334.80 -22120334.75 0.0064 0.0064 \*

Venus -65269-12-16 17:01 J -22117728.80 -22117728.79 -22117728.72 0.0067 0.0066

Venus -65268-07-29 23:30 J -22117503.72 -22117503.52 -22117503.31 0.0067 0.0029

Venus -65267-03-12 05:45 J -22117278.48 -22117278.26 -22117278.04 0.0068 0.0009

Venus -65267-10-23 11:45 J -22117053.16 -22117053.01 -22117052.84 0.0068 0.0047

Mercury -65195-08-28 22:18 J -22090810.60 -22090810.57 -22090810.52 0.0084 0.0081

Mercury -65195-11-24 23:45 J -22090722.57 -22090722.51 -22090722.42 0.0084 0.0070

Mercury -65194-02-21 01:25 J -22090634.53 -22090634.44 -22090634.33 0.0084 0.0059

Mercury -65194-05-20 02:52 J -22090546.48 -22090546.38 -22090546.25 0.0084 0.0049

Mercury -65194-08-16 04:47 J -22090458.43 -22090458.30 -22090458.18 0.0084 0.0038

Mercury -65194-11-12 06:13 J -22090370.37 -22090370.24 -22090370.11 0.0084 0.0028

Mercury -65193-02-08 07:40 J -22090282.32 -22090282.18 -22090282.04 0.0083 0.0018

Mercury -65193-05-06 09:06 J -22090194.26 -22090194.12 -22090193.97 0.0083 0.0008

Mercury -65193-08-02 10:47 J -22090106.19 -22090106.05 -22090105.91 0.0083 0.0003

Mercury -65193-10-29 12:13 J -22090018.13 -22090017.99 -22090017.85 0.0083 0.0013

Mercury -65192-01-25 13:25 J -22089930.07 -22089929.94 -22089929.80 0.0083 0.0023

Mercury -65192-04-23 14:52 J -22089842.00 -22089841.88 -22089841.74 0.0083 0.0033

Mercury -65192-07-20 16:18 J -22089753.93 -22089753.82 -22089753.69 0.0083 0.0043

Mercury -65192-10-16 17:45 J -22089665.86 -22089665.76 -22089665.64 0.0083 0.0052

Mercury -65191-01-12 19:11 J -22089577.78 -22089577.70 -22089577.60 0.0082 0.0062

Mercury -65191-04-10 20:37 J -22089489.70 -22089489.64 -22089489.56 0.0082 0.0071

Mercury -65191-07-07 22:04 J -22089401.60 -22089401.58 -22089401.55 0.0082 0.0081

Moon -65188-05-03 07:11 J -22088371.44 -22088371.20 -22088370.94 0.0081 0.0020

Earth -65188-05-03 10:33 J -22088371.31 -22088371.06 -22088370.80 0.0081 0.0018 \*

Mars -65186-10-16 09:49 J -22087475.37 -22087475.09 -22087474.79 0.0079 0.0007

Venus -65182-05-29 16:33 J -22086154.00 -22086153.81 -22086153.61 0.0077 0.0029

Venus -65181-01-10 01:11 J -22085928.66 -22085928.45 -22085928.25 0.0077 0.0024

Mercury -65042-09-10 11:45 J -22034915.04 -22034915.01 -22034914.93 0.0061 0.0058

Mercury -65042-12-07 12:57 J -22034827.03 -22034826.96 -22034826.85 0.0061 0.0053

Mercury -65041-03-04 14:09 J -22034739.00 -22034738.91 -22034738.78 0.0061 0.0048

Mercury -65041-05-31 15:21 J -22034650.97 -22034650.86 -22034650.72 0.0061 0.0043

Mercury -65041-08-27 16:33 J -22034562.93 -22034562.81 -22034562.65 0.0061 0.0038

Mercury -65041-11-23 17:45 J -22034474.90 -22034474.76 -22034474.59 0.0061 0.0033

Mercury -65040-02-19 18:57 J -22034386.85 -22034386.71 -22034386.54 0.0061 0.0028

Mercury -65040-05-18 20:09 J -22034298.81 -22034298.66 -22034298.48 0.0061 0.0024

Mercury -65040-08-14 21:21 J -22034210.77 -22034210.61 -22034210.42 0.0061 0.0019

Mercury -65040-11-10 22:33 J -22034122.72 -22034122.56 -22034122.37 0.0061 0.0014

Mercury -65039-02-07 00:13 J -22034034.67 -22034034.49 -22034034.31 0.0061 0.0008

Mercury -65039-05-06 01:25 J -22033946.62 -22033946.44 -22033946.26 0.0062 0.0003

Mercury -65039-08-02 02:37 J -22033858.57 -22033858.39 -22033858.21 0.0062 0.0003

Mercury -65039-10-29 03:49 J -22033770.52 -22033770.34 -22033770.16 0.0062 0.0008

Mercury -65038-01-25 05:01 J -22033682.47 -22033682.29 -22033682.11 0.0062 0.0013

Mercury -65038-04-23 05:59 J -22033594.41 -22033594.25 -22033594.06 0.0062 0.0019

Mercury -65038-07-20 07:11 J -22033506.35 -22033506.20 -22033506.02 0.0062 0.0024

Mercury -65038-10-16 08:37 J -22033418.29 -22033418.14 -22033417.97 0.0062 0.0029

Mercury -65037-01-12 10:04 J -22033330.23 -22033330.08 -22033329.93 0.0062 0.0034

Mercury -65037-04-09 11:01 J -22033242.16 -22033242.04 -22033241.89 0.0062 0.0040

Mercury -65037-07-06 12:28 J -22033154.09 -22033153.98 -22033153.85 0.0062 0.0045

Mercury -65037-10-02 13:54 J -22033066.02 -22033065.92 -22033065.81 0.0062 0.0051

Mercury -65037-12-29 14:52 J -22032977.94 -22032977.88 -22032977.79 0.0062 0.0057

Mercury -65036-03-27 16:33 J -22032889.83 -22032889.81 -22032889.79 0.0062 0.0062

Moon -65031-10-29 09:21 J -22030848.36 -22030848.11 -22030847.85 0.0064 0.0006

Earth -65031-10-29 12:57 J -22030848.21 -22030847.96 -22030847.69 0.0064 0.0007 \*

Mars -65027-08-16 15:21 J -22029461.10 -22029460.86 -22029460.62 0.0066 0.0047

Venus -65022-01-15 07:40 J -22027848.31 -22027848.18 -22027848.00 0.0067 0.0050

Venus -65022-08-28 14:09 J -22027623.12 -22027622.91 -22027622.68 0.0068 0.0012

Venus -65021-04-09 20:09 J -22027397.85 -22027397.66 -22027397.44 0.0068 0.0027

Venus -65021-11-21 01:54 J -22027172.45 -22027172.42 -22027172.33 0.0068 0.0066

# 65TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 65th millennium BCE.**

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
	TRANSIT							
	TIME							
Mercury	-64949-04-27 13:54 J	-22001081.93	-22001081.92	-22001081.91	0.0084	0.0084		
Mercury	-64949-07-24 15:06 J	-22000993.92	-22000993.87	-22000993.79	0.0084	0.0073		
Mercury	-64949-10-20 16:47 J	-22000905.88	-22000905.80	-22000905.70	0.0084	0.0062		
Mercury	-64948-01-16 18:28 J	-22000817.84	-22000817.73	-22000817.61	0.0084	0.0052		
Mercury	-64948-04-14 20:09 J	-22000729.78	-22000729.66	-22000729.54	0.0084	0.0041		
Mercury	-64948-07-11 21:35 J	-22000641.73	-22000641.60	-22000641.47	0.0084	0.0031		
Mercury	-64948-10-07 23:01 J	-22000553.67	-22000553.54	-22000553.40	0.0083	0.0021		
Mercury	-64947-01-04 00:42 J	-22000465.61	-22000465.47	-22000465.33	0.0083	0.0010		
Mercury	-64947-04-02 02:09 J	-22000377.55	-22000377.41	-22000377.27	0.0083	0.0000		
Mercury	-64947-06-29 03:35 J	-22000289.49	-22000289.35	-22000289.21	0.0083	0.0010		
Mercury	-64947-09-25 05:01 J	-22000201.42	-22000201.29	-22000201.15	0.0083	0.0020		
Mercury	-64947-12-22 06:28 J	-22000113.36	-22000113.23	-22000113.10	0.0083	0.0030		
Mercury	-64946-03-20 07:40 J	-22000025.29	-22000025.18	-22000025.04	0.0083	0.0040		
Mercury	-64946-06-16 09:06 J	-21999937.22	-21999937.12	-21999936.99	0.0083	0.0050		
Mercury	-64946-09-12 10:47 J	-21999849.14	-21999849.05	-21999848.95	0.0082	0.0059		
Mercury	-64946-12-09 11:59 J	-21999761.06	-21999761.00	-21999760.91	0.0082	0.0068		
Mercury	-64945-03-06 13:40 J	-21999672.97	-21999672.93	-21999672.89	0.0082	0.0078		
Moon	-64942-05-05 23:45 J	-21998517.72	-21998517.51	-21998517.28	0.0080	0.0039		
Earth	-64942-05-06 01:11 J	-21998517.67	-21998517.45	-21998517.22	0.0080	0.0040	*	
Venus	-64937-11-14 01:25 J	-21996498.58	-21996498.44	-21996498.29	0.0077	0.0057		
Venus	-64936-06-27 10:04 J	-21996273.30	-21996273.08	-21996272.86	0.0077	0.0002		
Venus	-64935-02-07 18:13 J	-21996047.89	-21996047.74	-21996047.57	0.0077	0.0051		

Mercury -64796-08-06 03:06 J -21945098.43 -21945098.37 -21945098.30 0.0061 0.0056

Mercury -64796-11-02 03:35 J -21945010.41 -21945010.35 -21945010.23 0.0061 0.0052

Mercury -64795-01-29 05:01 J -21944922.39 -21944922.29 -21944922.16 0.0061 0.0047

Mercury -64795-04-27 06:13 J -21944834.35 -21944834.24 -21944834.09 0.0061 0.0042

Mercury -64795-07-24 07:25 J -21944746.32 -21944746.19 -21944746.03 0.0061 0.0037

Mercury -64795-10-20 08:37 J -21944658.28 -21944658.14 -21944657.97 0.0061 0.0032

Mercury -64794-01-16 09:49 J -21944570.24 -21944570.09 -21944569.91 0.0061 0.0027

Mercury -64794-04-14 11:01 J -21944482.19 -21944482.04 -21944481.86 0.0061 0.0022

Mercury -64794-07-11 12:42 J -21944394.15 -21944393.97 -21944393.80 0.0061 0.0017

Mercury -64794-10-07 13:40 J -21944306.10 -21944305.93 -21944305.75 0.0061 0.0012

Mercury -64793-01-03 14:52 J -21944218.05 -21944217.88 -21944217.69 0.0061 0.0007

Mercury -64793-03-31 16:18 J -21944130.00 -21944129.82 -21944129.64 0.0062 0.0002

Mercury -64793-06-27 17:30 J -21944041.95 -21944041.77 -21944041.59 0.0062 0.0004

Mercury -64793-09-23 18:42 J -21943953.90 -21943953.72 -21943953.54 0.0062 0.0009

Mercury -64793-12-20 19:54 J -21943865.84 -21943865.67 -21943865.49 0.0062 0.0014

Mercury -64792-03-18 20:52 J -21943777.79 -21943777.63 -21943777.44 0.0062 0.0020

Mercury -64792-06-14 22:18 J -21943689.73 -21943689.57 -21943689.40 0.0062 0.0025

Mercury -64792-09-10 23:30 J -21943601.67 -21943601.52 -21943601.35 0.0062 0.0030

Mercury -64792-12-08 00:57 J -21943513.60 -21943513.46 -21943513.31 0.0062 0.0035

Mercury -64791-03-06 01:54 J -21943425.54 -21943425.42 -21943425.27 0.0062 0.0041

Mercury -64791-06-02 03:21 J -21943337.47 -21943337.36 -21943337.23 0.0062 0.0046

Mercury -64791-08-29 04:18 J -21943249.39 -21943249.32 -21943249.19 0.0062 0.0053

Mercury -64791-11-25 05:45 J -21943161.31 -21943161.26 -21943161.17 0.0062 0.0058

Earth -64786-10-30 08:09 J -21941361.28 -21941361.16 -21941361.00 0.0064 0.0054

Moon -64786-10-30 09:49 J -21941361.23 -21941361.09 -21941360.93 0.0064 0.0053 \*

Earth -64785-10-30 20:37 J -21940994.86 -21940994.64 -21940994.41 0.0064 0.0031

Moon -64785-10-30 20:52 J -21940994.84 -21940994.63 -21940994.39 0.0064 0.0030 \*

Venus -64776-02-12 21:21 J -21937967.79 -21937967.61 -21937967.41 0.0068 0.0037

Venus -64776-09-26 03:49 J -21937742.57 -21937742.34 -21937742.12 0.0068 0.0002

Venus -64775-05-09 09:35 J -21937517.27 -21937517.10 -21937516.91 0.0068 0.0040



Mercury -64703-03-24 05:59 J -21911265.29 -21911265.25 -21911265.20 0.0084 0.0079

Mercury -64703-06-20 07:25 J -21911177.26 -21911177.19 -21911177.10 0.0084 0.0069

Mercury -64703-09-16 09:06 J -21911089.21 -21911089.12 -21911089.01 0.0084 0.0058

Mercury -64703-12-13 10:47 J -21911001.16 -21911001.05 -21911000.93 0.0084 0.0048

Mercury -64702-03-11 12:13 J -21910913.11 -21910912.99 -21910912.86 0.0084 0.0038

Mercury -64702-06-07 13:54 J -21910825.05 -21910824.92 -21910824.78 0.0084 0.0027

Mercury -64702-09-03 15:21 J -21910736.99 -21910736.86 -21910736.72 0.0083 0.0017

Mercury -64702-11-30 17:01 J -21910648.93 -21910648.79 -21910648.65 0.0083 0.0007

Mercury -64701-02-26 18:28 J -21910560.87 -21910560.73 -21910560.59 0.0083 0.0003

Mercury -64701-05-24 19:54 J -21910472.81 -21910472.67 -21910472.53 0.0083 0.0013

Mercury -64701-08-20 21:21 J -21910384.74 -21910384.61 -21910384.47 0.0083 0.0023

Mercury -64701-11-16 22:47 J -21910296.68 -21910296.55 -21910296.42 0.0083 0.0033

Mercury -64700-02-13 00:13 J -21910208.61 -21910208.49 -21910208.37 0.0083 0.0043

Mercury -64700-05-12 01:25 J -21910120.54 -21910120.44 -21910120.32 0.0082 0.0053

Mercury -64700-08-08 03:06 J -21910032.46 -21910032.37 -21910032.28 0.0082 0.0062

Mercury -64700-11-04 04:18 J -21909944.38 -21909944.32 -21909944.24 0.0082 0.0071

Mercury -64699-01-31 05:30 J -21909856.28 -21909856.27 -21909856.23 0.0082 0.0081

Venus -64691-12-13 16:47 J -21906617.99 -21906617.80 -21906617.60 0.0077 0.0035

Venus -64690-07-27 01:11 J -21906392.65 -21906392.45 -21906392.23 0.0077 0.0019

Venus -64689-03-08 09:21 J -21906167.16 -21906167.11 -21906167.01 0.0076 0.0072

Mercury -64550-04-05 16:33 J -21855369.82 -21855369.81 -21855369.75 0.0061 0.0060

Mercury -64550-07-02 17:45 J -21855281.81 -21855281.76 -21855281.66 0.0061 0.0055

Mercury -64550-09-28 18:57 J -21855193.79 -21855193.71 -21855193.59 0.0061 0.0050

Mercury -64550-12-25 20:09 J -21855105.76 -21855105.66 -21855105.52 0.0061 0.0045

Mercury -64549-03-22 21:21 J -21855017.73 -21855017.61 -21855017.46 0.0061 0.0040

Mercury -64549-06-18 22:33 J -21854929.69 -21854929.56 -21854929.40 0.0061 0.0035

Mercury -64549-09-14 23:45 J -21854841.65 -21854841.51 -21854841.34 0.0061 0.0030

Mercury -64549-12-12 00:57 J -21854753.61 -21854753.46 -21854753.28 0.0061 0.0025

Mercury -64548-03-10 02:09 J -21854665.57 -21854665.41 -21854665.23 0.0061 0.0020

Mercury -64548-06-06 03:21 J -21854577.52 -21854577.36 -21854577.17 0.0061 0.0016

Mercury -64548-09-02 04:33 J -21854489.47 -21854489.31 -21854489.12 0.0061 0.0011

Mercury -64548-11-29 06:13 J -21854401.42 -21854401.24 -21854401.06 0.0062 0.0005

Mercury -64547-02-25 07:11 J -21854313.37 -21854313.20 -21854313.01 0.0062 0.0002

Mercury -64547-05-24 08:23 J -21854225.32 -21854225.15 -21854224.96 0.0062 0.0006

Mercury -64547-08-20 09:35 J -21854137.27 -21854137.10 -21854136.91 0.0062 0.0011

Mercury -64547-11-16 11:01 J -21854049.21 -21854049.04 -21854048.86 0.0062 0.0016

Mercury -64546-02-12 12:13 J -21853961.16 -21853960.99 -21853960.82 0.0062 0.0021

Mercury -64546-05-11 13:11 J -21853873.10 -21853872.95 -21853872.77 0.0062 0.0027

Mercury -64546-08-07 14:37 J -21853785.03 -21853784.89 -21853784.73 0.0062 0.0032

Mercury -64546-11-03 16:04 J -21853696.97 -21853696.83 -21853696.68 0.0062 0.0037

Mercury -64545-01-30 17:01 J -21853608.90 -21853608.79 -21853608.64 0.0062 0.0043

Mercury -64545-04-27 18:13 J -21853520.83 -21853520.74 -21853520.60 0.0062 0.0049

Mercury -64545-07-24 19:54 J -21853432.75 -21853432.67 -21853432.57 0.0062 0.0054

Mercury -64545-10-20 20:52 J -21853344.66 -21853344.63 -21853344.55 0.0062 0.0060

Moon -64540-10-31 13:54 J -21851508.14 -21851507.92 -21851507.66 0.0064 0.0026

Earth -64540-10-31 17:16 J -21851507.99 -21851507.78 -21851507.52 0.0064 0.0028 \*

Earth -64539-11-02 05:01 J -21851141.37 -21851141.29 -21851141.14 0.0064 0.0058

Moon -64539-11-02 08:52 J -21851141.24 -21851141.13 -21851140.98 0.0064 0.0056 \*

Mars -64536-07-08 20:37 J -21850161.93 -21850161.64 -21850161.30 0.0065 0.0028

Venus -64531-08-01 05:45 J -21848312.36 -21848312.26 -21848312.15 0.0067 0.0059

Venus -64530-03-14 11:45 J -21848087.22 -21848087.01 -21848086.79 0.0068 0.0021

Venus -64530-10-25 17:45 J -21847861.97 -21847861.76 -21847861.53 0.0068 0.0017

Venus -64529-06-06 23:45 J -21847636.62 -21847636.51 -21847636.37 0.0068 0.0056

Mercury -64458-11-21 20:52 J -21821536.63 -21821536.63 -21821536.61 0.0084 0.0084

Mercury -64457-02-17 22:33 J -21821448.62 -21821448.56 -21821448.48 0.0084 0.0073

Mercury -64457-05-15 23:59 J -21821360.58 -21821360.50 -21821360.39 0.0084 0.0063

Mercury -64457-08-12 01:54 J -21821272.53 -21821272.42 -21821272.31 0.0084 0.0052

Mercury -64457-11-08 03:21 J -21821184.48 -21821184.36 -21821184.23 0.0084 0.0042

Mercury -64456-02-04 04:47 J -21821096.42 -21821096.30 -21821096.16 0.0084 0.0032

Mercury -64456-05-03 06:28 J -21821008.37 -21821008.23 -21821008.09 0.0083 0.0021

Mercury -64456-07-30 07:54 J -21820920.31 -21820920.17 -21820920.03 0.0083 0.0011  
 Mercury -64456-10-26 09:35 J -21820832.24 -21820832.10 -21820831.96 0.0083 0.0002  
 Mercury -64455-01-22 11:01 J -21820744.18 -21820744.04 -21820743.90 0.0083 0.0009  
 Mercury -64455-04-20 12:28 J -21820656.12 -21820655.98 -21820655.84 0.0083 0.0019  
 Mercury -64455-07-17 13:54 J -21820568.05 -21820567.92 -21820567.79 0.0083 0.0029  
 Mercury -64455-10-13 15:06 J -21820479.98 -21820479.87 -21820479.73 0.0083 0.0039  
 Mercury -64454-01-09 16:47 J -21820391.91 -21820391.80 -21820391.68 0.0083 0.0048  
 Mercury -64454-04-07 18:13 J -21820303.84 -21820303.74 -21820303.64 0.0082 0.0057  
 Mercury -64454-07-04 19:25 J -21820215.76 -21820215.69 -21820215.60 0.0082 0.0067  
 Mercury -64454-09-30 20:52 J -21820127.67 -21820127.63 -21820127.57 0.0082 0.0076  
 Moon -64451-05-07 17:59 J -21819177.96 -21819177.75 -21819177.50 0.0081 0.0033  
 Earth -64451-05-07 20:37 J -21819177.86 -21819177.64 -21819177.39 0.0081 0.0033 \*  
 Mars -64448-01-31 17:01 J -21818177.96 -21818177.79 -21818177.55 0.0079 0.0057  
 Venus -64445-05-31 00:13 J -21816962.60 -21816962.49 -21816962.37 0.0077 0.0065  
 Venus -64444-01-11 08:52 J -21816737.34 -21816737.13 -21816736.91 0.0077 0.0010  
 Venus -64444-08-24 17:01 J -21816511.95 -21816511.79 -21816511.60 0.0077 0.0044  
 Mercury -64304-03-01 06:57 J -21765553.22 -21765553.21 -21765553.15 0.0061 0.0060  
 Mercury -64304-05-28 08:09 J -21765465.21 -21765465.16 -21765465.06 0.0061 0.0055  
 Mercury -64304-08-24 09:35 J -21765377.19 -21765377.10 -21765376.99 0.0061 0.0050  
 Mercury -64304-11-20 10:47 J -21765289.16 -21765289.05 -21765288.92 0.0061 0.0045  
 Mercury -64303-02-16 11:59 J -21765201.12 -21765201.00 -21765200.86 0.0061 0.0040  
 Mercury -64303-05-15 13:11 J -21765113.09 -21765112.95 -21765112.80 0.0061 0.0035  
 Mercury -64303-08-11 14:23 J -21765025.05 -21765024.90 -21765024.74 0.0061 0.0030  
 Mercury -64303-11-07 15:35 J -21764937.01 -21764936.85 -21764936.68 0.0061 0.0025  
 Mercury -64302-02-03 16:47 J -21764848.96 -21764848.80 -21764848.63 0.0061 0.0020  
 Mercury -64302-05-02 17:59 J -21764760.92 -21764760.75 -21764760.57 0.0061 0.0015  
 Mercury -64302-07-29 19:11 J -21764672.87 -21764672.70 -21764672.52 0.0061 0.0010  
 Mercury -64302-10-25 20:23 J -21764584.82 -21764584.65 -21764584.47 0.0061 0.0005  
 Mercury -64301-01-21 21:35 J -21764496.78 -21764496.60 -21764496.41 0.0062 0.0002  
 Mercury -64301-04-18 22:47 J -21764408.72 -21764408.55 -21764408.36 0.0062 0.0005

Mercury -64301-07-15 23:59 J -21764320.67 -21764320.50 -21764320.31 0.0062 0.0011  
 Mercury -64301-10-12 01:11 J -21764232.62 -21764232.45 -21764232.27 0.0062 0.0016  
 Mercury -64300-01-08 02:23 J -21764144.56 -21764144.40 -21764144.22 0.0062 0.0021  
 Mercury -64300-04-06 03:35 J -21764056.50 -21764056.35 -21764056.17 0.0062 0.0026  
 Mercury -64300-07-03 05:01 J -21763968.44 -21763968.29 -21763968.13 0.0062 0.0031  
 Mercury -64300-09-29 05:59 J -21763880.38 -21763880.25 -21763880.09 0.0062 0.0037  
 Mercury -64300-12-26 07:25 J -21763792.31 -21763792.19 -21763792.05 0.0062 0.0042  
 Mercury -64299-03-24 08:52 J -21763704.24 -21763704.13 -21763704.01 0.0062 0.0048  
 Mercury -64299-06-20 09:49 J -21763616.16 -21763616.09 -21763615.98 0.0062 0.0053  
 Mercury -64299-09-16 11:16 J -21763528.08 -21763528.03 -21763527.96 0.0062 0.0059  
 Earth -64294-11-02 23:01 J -21761654.79 -21761654.54 -21761654.27 0.0064 0.0011  
 Moon -64294-11-02 23:16 J -21761654.78 -21761654.53 -21761654.28 0.0064 0.0008 \*  
 Venus -64285-08-29 16:33 J -21758431.94 -21758431.81 -21758431.65 0.0067 0.0051  
 Venus -64284-04-11 22:47 J -21758206.77 -21758206.55 -21758206.32 0.0068 0.0013  
 Venus -64284-11-23 04:33 J -21757981.50 -21757981.31 -21757981.08 0.0068 0.0026  
 Venus -64283-07-06 10:33 J -21757756.10 -21757756.06 -21757755.97 0.0068 0.0066  
 Mercury -64211-01-13 13:40 J -21731631.99 -21731631.93 -21731631.86 0.0084 0.0074  
 Mercury -64211-04-11 15:06 J -21731543.95 -21731543.87 -21731543.77 0.0084 0.0064  
 Mercury -64211-07-08 16:47 J -21731455.90 -21731455.80 -21731455.68 0.0084 0.0053  
 Mercury -64211-10-04 18:13 J -21731367.85 -21731367.74 -21731367.61 0.0084 0.0043  
 Mercury -64211-12-31 19:54 J -21731279.80 -21731279.67 -21731279.53 0.0084 0.0033  
 Mercury -64210-03-29 21:21 J -21731191.74 -21731191.61 -21731191.46 0.0083 0.0023  
 Mercury -64210-06-25 23:01 J -21731103.68 -21731103.54 -21731103.40 0.0083 0.0012  
 Mercury -64210-09-22 00:28 J -21731015.62 -21731015.48 -21731015.33 0.0083 0.0003  
 Mercury -64210-12-19 02:09 J -21730927.55 -21730927.41 -21730927.27 0.0083 0.0008  
 Mercury -64209-03-16 03:35 J -21730839.49 -21730839.35 -21730839.21 0.0083 0.0018  
 Mercury -64209-06-12 05:01 J -21730751.42 -21730751.29 -21730751.16 0.0083 0.0028  
 Mercury -64209-09-08 06:13 J -21730663.35 -21730663.24 -21730663.10 0.0083 0.0038  
 Mercury -64209-12-05 07:40 J -21730575.28 -21730575.18 -21730575.05 0.0083 0.0047  
 Mercury -64208-03-03 09:06 J -21730487.21 -21730487.12 -21730487.01 0.0082 0.0057

Mercury -64208-05-30 10:33 J -21730399.13 -21730399.06 -21730398.97 0.0082 0.0066

Mercury -64208-08-26 11:59 J -21730311.04 -21730311.00 -21730310.94 0.0082 0.0076

Earth -64205-05-09 02:52 J -21729324.63 -21729324.38 -21729324.12 0.0081 0.0007

Moon -64205-05-09 05:45 J -21729324.51 -21729324.26 -21729324.00 0.0081 0.0008 \*

Venus -64199-06-29 12:42 J -21727082.11 -21727081.97 -21727081.80 0.0077 0.0053

Venus -64198-02-09 21:35 J -21726856.82 -21726856.60 -21726856.38 0.0077 0.0002

Venus -64198-09-23 05:30 J -21726631.40 -21726631.27 -21726631.10 0.0077 0.0056

Mercury -64058-01-25 21:49 J -21675736.61 -21675736.59 -21675736.53 0.0061 0.0059

Mercury -64058-04-23 23:01 J -21675648.60 -21675648.54 -21675648.44 0.0061 0.0054

Mercury -64058-07-21 00:28 J -21675560.58 -21675560.48 -21675560.37 0.0061 0.0049

Mercury -64058-10-17 01:40 J -21675472.55 -21675472.43 -21675472.31 0.0061 0.0044

Mercury -64057-01-13 02:23 J -21675384.51 -21675384.40 -21675384.24 0.0061 0.0040

Mercury -64057-04-10 03:35 J -21675296.48 -21675296.35 -21675296.18 0.0061 0.0035

Mercury -64057-07-07 04:47 J -21675208.44 -21675208.30 -21675208.12 0.0061 0.0030

Mercury -64057-10-03 05:59 J -21675120.39 -21675120.25 -21675120.07 0.0061 0.0026

Mercury -64057-12-30 07:11 J -21675032.35 -21675032.20 -21675032.01 0.0061 0.0021

Mercury -64056-03-28 08:52 J -21674944.31 -21674944.13 -21674943.96 0.0061 0.0015

Mercury -64056-06-24 10:04 J -21674856.26 -21674856.08 -21674855.90 0.0061 0.0010

Mercury -64056-09-20 11:16 J -21674768.21 -21674768.03 -21674767.85 0.0062 0.0005

Mercury -64056-12-17 12:28 J -21674680.16 -21674679.98 -21674679.80 0.0062 0.0000

Mercury -64055-03-15 13:40 J -21674592.11 -21674591.93 -21674591.75 0.0062 0.0006

Mercury -64055-06-11 14:52 J -21674504.06 -21674503.88 -21674503.70 0.0062 0.0011

Mercury -64055-09-07 16:04 J -21674416.00 -21674415.83 -21674415.65 0.0062 0.0016

Mercury -64055-12-04 17:16 J -21674327.94 -21674327.78 -21674327.60 0.0062 0.0021

Mercury -64054-03-02 18:42 J -21674239.89 -21674239.72 -21674239.56 0.0062 0.0026

Mercury -64054-05-29 19:25 J -21674151.83 -21674151.69 -21674151.52 0.0062 0.0032

Mercury -64054-08-25 20:52 J -21674063.76 -21674063.63 -21674063.47 0.0062 0.0037

Mercury -64054-11-21 22:18 J -21673975.69 -21673975.57 -21673975.43 0.0062 0.0043

Mercury -64053-02-17 23:16 J -21673887.62 -21673887.53 -21673887.40 0.0062 0.0048

Mercury -64053-05-16 00:42 J -21673799.55 -21673799.47 -21673799.37 0.0062 0.0054

Mercury -64053-08-12 02:09 J -21673711.46 -21673711.41 -21673711.35 0.0062 0.0059

Earth -64048-11-04 05:59 J -21671801.51 -21671801.25 -21671800.99 0.0064 0.0011

Moon -64048-11-04 09:06 J -21671801.36 -21671801.12 -21671800.85 0.0064 0.0014 \*

Venus -64039-09-28 05:16 J -21668551.45 -21668551.28 -21668551.08 0.0068 0.0039

Venus -64038-05-11 11:30 J -21668326.25 -21668326.02 -21668325.79 0.0068 0.0000

Venus -64038-12-22 17:01 J -21668100.95 -21668100.79 -21668100.58 0.0068 0.0039

# 64RD MILLENNIUM BCE

This is a list of transits visible from Pluto in the 64th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury -63966-09-13 03:49 J -21641903.35 -21641903.34 -21641903.31 0.0084 0.0083

Mercury -63966-12-10 05:45 J -21641815.33 -21641815.26 -21641815.19 0.0084 0.0073

Mercury -63965-03-07 06:57 J -21641727.29 -21641727.21 -21641727.10 0.0084 0.0062

Mercury -63965-06-03 08:37 J -21641639.24 -21641639.14 -21641639.02 0.0084 0.0052

Mercury -63965-08-30 10:04 J -21641551.19 -21641551.08 -21641550.94 0.0084 0.0042

Mercury -63965-11-26 11:59 J -21641463.14 -21641463.00 -21641462.87 0.0084 0.0031

Mercury -63964-02-22 13:25 J -21641375.08 -21641374.94 -21641374.80 0.0083 0.0021

Mercury -63964-05-21 14:52 J -21641287.02 -21641286.88 -21641286.74 0.0083 0.0011

Mercury -63964-08-17 16:18 J -21641198.96 -21641198.82 -21641198.67 0.0083 0.0003

Mercury -63964-11-13 17:45 J -21641110.89 -21641110.76 -21641110.61 0.0083 0.0010

Mercury -63963-02-09 19:25 J -21641022.83 -21641022.69 -21641022.56 0.0083 0.0019

Mercury -63963-05-08 20:52 J -21640934.76 -21640934.63 -21640934.50 0.0083 0.0029

Mercury -63963-08-04 22:04 J -21640846.69 -21640846.58 -21640846.45 0.0083 0.0039

Mercury -63963-10-31 23:30 J -21640758.62 -21640758.52 -21640758.40 0.0082 0.0049

Mercury -63962-01-28 01:11 J -21640670.55 -21640670.45 -21640670.35 0.0082 0.0058

Mercury -63962-04-26 02:23 J -21640582.47 -21640582.40 -21640582.31 0.0082 0.0067

Mercury -63962-07-23 04:04 J -21640494.38 -21640494.33 -21640494.29 0.0082 0.0077

Earth -63959-05-11 11:59 J -21639471.24 -21639471.00 -21639470.76 0.0081 0.0029

Moon -63959-05-11 12:57 J -21639471.19 -21639470.96 -21639470.69 0.0081 0.0028 \*

Venus -63953-07-28 02:52 J -21637201.56 -21637201.38 -21637201.18 0.0077 0.0035

Venus -63952-03-10 11:45 J -21636976.22 -21636976.01 -21636975.80 0.0077 0.0019

Venus -63952-10-21 19:25 J -21636750.73 -21636750.69 -21636750.60 0.0076 0.0073

Mercury -63813-12-21 12:13 J -21585920.01 -21585919.99 -21585919.93 0.0061 0.0059

Mercury -63812-03-19 13:25 J -21585832.00 -21585831.94 -21585831.84 0.0061 0.0054

Mercury -63812-06-15 14:52 J -21585743.98 -21585743.88 -21585743.77 0.0061 0.0049

Mercury -63812-09-11 16:04 J -21585655.95 -21585655.83 -21585655.71 0.0061 0.0044

Mercury -63812-12-08 17:16 J -21585567.91 -21585567.78 -21585567.64 0.0061 0.0040

Mercury -63811-03-06 17:59 J -21585479.88 -21585479.75 -21585479.58 0.0061 0.0035

Mercury -63811-06-02 19:11 J -21585391.84 -21585391.70 -21585391.53 0.0061 0.0030

Mercury -63811-08-29 20:23 J -21585303.79 -21585303.65 -21585303.47 0.0061 0.0026

Mercury -63811-11-25 21:35 J -21585215.75 -21585215.60 -21585215.41 0.0061 0.0021

Mercury -63810-02-21 23:01 J -21585127.71 -21585127.54 -21585127.36 0.0061 0.0015

Mercury -63810-05-21 00:28 J -21585039.66 -21585039.48 -21585039.31 0.0061 0.0010

Mercury -63810-08-17 01:40 J -21584951.61 -21584951.43 -21584951.25 0.0062 0.0005

Mercury -63810-11-13 02:52 J -21584863.56 -21584863.38 -21584863.20 0.0062 0.0000

Mercury -63809-02-09 04:04 J -21584775.51 -21584775.33 -21584775.15 0.0062 0.0005

Mercury -63809-05-07 05:16 J -21584687.46 -21584687.28 -21584687.10 0.0062 0.0011

Mercury -63809-08-03 06:28 J -21584599.40 -21584599.23 -21584599.05 0.0062 0.0016

Mercury -63809-10-30 07:40 J -21584511.34 -21584511.18 -21584511.00 0.0062 0.0021

Mercury -63808-01-26 08:52 J -21584423.29 -21584423.13 -21584422.96 0.0062 0.0026

Mercury -63808-04-24 10:18 J -21584335.22 -21584335.07 -21584334.91 0.0062 0.0031

Mercury -63808-07-21 11:16 J -21584247.16 -21584247.03 -21584246.87 0.0062 0.0037

Mercury -63808-10-17 12:28 J -21584159.09 -21584158.98 -21584158.83 0.0062 0.0043

Mercury -63807-01-13 13:54 J -21584071.02 -21584070.92 -21584070.79 0.0062 0.0048

Mercury -63807-04-11 14:52 J -21583982.95 -21583982.88 -21583982.76 0.0062 0.0054

Mercury -63807-07-08 16:18 J -21583894.86 -21583894.82 -21583894.74 0.0062 0.0059

Moon -63803-11-04 22:33 J -21582314.64 -21582314.56 -21582314.44 0.0064 0.0058

Earth -63803-11-04 23:45 J -21582314.62 -21582314.51 -21582314.35 0.0064 0.0055 \*

Moon -63802-11-06 11:01 J -21581948.27 -21581948.04 -21581947.81 0.0064 0.0032

Earth -63802-11-06 11:59 J -21581948.22 -21581948.00 -21581947.76 0.0064 0.0029 \*

Mars -63799-10-22 07:25 J -21580867.50 -21580867.19 -21580866.86 0.0065 0.0022

Venus -63793-03-15 11:01 J -21578896.04 -21578896.04 -21578895.99 0.0067 0.0067

Venus -63793-10-26 17:16 J -21578670.97 -21578670.78 -21578670.56 0.0068 0.0029

Venus -63792-06-08 23:30 J -21578445.74 -21578445.52 -21578445.29 0.0068 0.0010

Venus -63791-01-20 05:16 J -21578220.42 -21578220.28 -21578220.11 0.0068 0.0049

Mercury -63720-08-08 18:57 J -21552086.71 -21552086.71 -21552086.68 0.0084 0.0084

Mercury -63720-11-04 20:37 J -21551998.70 -21551998.64 -21551998.56 0.0084 0.0073

Mercury -63719-01-31 22:04 J -21551910.66 -21551910.58 -21551910.47 0.0084 0.0063

Mercury -63719-04-29 23:59 J -21551822.61 -21551822.50 -21551822.39 0.0084 0.0052

Mercury -63719-07-27 01:25 J -21551734.55 -21551734.44 -21551734.31 0.0084 0.0042

Mercury -63719-10-23 03:06 J -21551646.50 -21551646.37 -21551646.24 0.0084 0.0032

Mercury -63718-01-19 04:33 J -21551558.44 -21551558.31 -21551558.17 0.0083 0.0022

Mercury -63718-04-17 06:13 J -21551470.38 -21551470.24 -21551470.10 0.0083 0.0011

Mercury -63718-07-14 07:40 J -21551382.32 -21551382.18 -21551382.04 0.0083 0.0002

Mercury -63718-10-10 09:06 J -21551294.26 -21551294.12 -21551293.97 0.0083 0.0009

Mercury -63717-01-06 10:33 J -21551206.19 -21551206.06 -21551205.91 0.0083 0.0019

Mercury -63717-04-03 12:13 J -21551118.12 -21551117.99 -21551117.86 0.0083 0.0028

Mercury -63717-06-30 13:40 J -21551030.06 -21551029.93 -21551029.81 0.0083 0.0038

Mercury -63717-09-26 14:52 J -21550941.99 -21550941.88 -21550941.76 0.0082 0.0048

Mercury -63717-12-23 16:33 J -21550853.91 -21550853.81 -21550853.71 0.0082 0.0057

Mercury -63716-03-21 17:45 J -21550765.83 -21550765.76 -21550765.67 0.0082 0.0066

Mercury -63716-06-17 19:25 J -21550677.75 -21550677.69 -21550677.64 0.0082 0.0076



Moon -63713-05-12 14:52 J -21549618.06 -21549617.88 -21549617.67 0.0080 0.0052  
 Earth -63713-05-12 17:59 J -21549617.91 -21549617.75 -21549617.54 0.0080 0.0056 \*  
 Mars -63711-05-18 18:13 J -21548882.00 -21548881.74 -21548881.45 0.0079 0.0027  
 Venus -63707-08-26 15:49 J -21547321.05 -21547320.84 -21547320.64 0.0077 0.0022  
 Venus -63706-04-09 00:13 J -21547095.68 -21547095.49 -21547095.29 0.0077 0.0032  
 Mercury -63567-11-17 03:35 J -21496103.39 -21496103.35 -21496103.29 0.0061 0.0058  
 Mercury -63566-02-13 04:47 J -21496015.38 -21496015.30 -21496015.21 0.0061 0.0053  
 Mercury -63566-05-12 05:30 J -21495927.35 -21495927.27 -21495927.14 0.0061 0.0049  
 Mercury -63566-08-08 06:42 J -21495839.32 -21495839.22 -21495839.08 0.0061 0.0044  
 Mercury -63566-11-04 07:54 J -21495751.29 -21495751.17 -21495751.02 0.0061 0.0039  
 Mercury -63565-01-31 09:06 J -21495663.25 -21495663.12 -21495662.96 0.0061 0.0034  
 Mercury -63565-04-28 10:18 J -21495575.21 -21495575.07 -21495574.90 0.0061 0.0029  
 Mercury -63565-07-25 11:30 J -21495487.17 -21495487.02 -21495486.84 0.0061 0.0025  
 Mercury -63565-10-21 12:42 J -21495399.13 -21495398.97 -21495398.79 0.0061 0.0020  
 Mercury -63564-01-17 13:54 J -21495311.08 -21495310.92 -21495310.73 0.0061 0.0015  
 Mercury -63564-04-15 15:06 J -21495223.04 -21495222.87 -21495222.68 0.0062 0.0010  
 Mercury -63564-07-12 16:33 J -21495134.99 -21495134.81 -21495134.63 0.0062 0.0004  
 Mercury -63564-10-08 17:45 J -21495046.94 -21495046.76 -21495046.58 0.0062 0.0001  
 Mercury -63563-01-04 18:57 J -21494958.89 -21494958.71 -21494958.53 0.0062 0.0006  
 Mercury -63563-04-02 20:09 J -21494870.83 -21494870.66 -21494870.48 0.0062 0.0011  
 Mercury -63563-06-29 21:21 J -21494782.78 -21494782.61 -21494782.43 0.0062 0.0017  
 Mercury -63563-09-25 22:33 J -21494694.72 -21494694.56 -21494694.38 0.0062 0.0022  
 Mercury -63563-12-22 23:45 J -21494606.66 -21494606.51 -21494606.34 0.0062 0.0027  
 Mercury -63562-03-21 01:11 J -21494518.60 -21494518.45 -21494518.29 0.0062 0.0032  
 Mercury -63562-06-17 02:37 J -21494430.54 -21494430.39 -21494430.25 0.0062 0.0038  
 Mercury -63562-09-13 03:21 J -21494342.47 -21494342.36 -21494342.21 0.0062 0.0043  
 Mercury -63562-12-10 04:47 J -21494254.40 -21494254.30 -21494254.17 0.0062 0.0049  
 Mercury -63561-03-07 06:13 J -21494166.32 -21494166.24 -21494166.14 0.0062 0.0054  
 Mercury -63561-06-03 07:11 J -21494078.23 -21494078.20 -21494078.12 0.0062 0.0060  
 Earth -63557-11-06 08:09 J -21492461.37 -21492461.16 -21492460.92 0.0064 0.0032

Moon -63557-11-06 11:45 J -21492461.21 -21492461.01 -21492460.78 0.0064 0.0035 \*  
 Moon -63556-11-07 16:33 J -21492094.91 -21492094.81 -21492094.65 0.0064 0.0056  
 Earth -63556-11-07 19:40 J -21492094.80 -21492094.68 -21492094.49 0.0064 0.0053 \*  
 Venus -63547-04-14 00:28 J -21489015.60 -21489015.48 -21489015.31 0.0068 0.0053  
 Venus -63547-11-25 06:57 J -21488790.43 -21488790.21 -21488789.99 0.0068 0.0014  
 Venus -63546-07-08 12:57 J -21488565.16 -21488564.96 -21488564.74 0.0068 0.0025  
 Venus -63545-02-18 18:42 J -21488339.76 -21488339.72 -21488339.63 0.0068 0.0065  
 Mercury -63474-07-05 11:16 J -21462270.06 -21462270.03 -21462269.97 0.0084 0.0079  
 Mercury -63474-10-01 13:11 J -21462182.03 -21462181.95 -21462181.87 0.0084 0.0068  
 Mercury -63474-12-28 14:37 J -21462093.98 -21462093.89 -21462093.78 0.0084 0.0058  
 Mercury -63473-03-25 16:04 J -21462005.93 -21462005.83 -21462005.70 0.0084 0.0048  
 Mercury -63473-06-21 17:45 J -21461917.88 -21461917.76 -21461917.62 0.0084 0.0038  
 Mercury -63473-09-17 19:25 J -21461829.82 -21461829.69 -21461829.55 0.0083 0.0027  
 Mercury -63473-12-14 20:52 J -21461741.76 -21461741.63 -21461741.48 0.0083 0.0017  
 Mercury -63472-03-12 22:33 J -21461653.70 -21461653.56 -21461653.42 0.0083 0.0007  
 Mercury -63472-06-08 23:59 J -21461565.64 -21461565.50 -21461565.35 0.0083 0.0004  
 Mercury -63472-09-05 01:25 J -21461477.57 -21461477.44 -21461477.29 0.0083 0.0013  
 Mercury -63472-12-02 02:52 J -21461389.51 -21461389.38 -21461389.24 0.0083 0.0023  
 Mercury -63471-02-28 04:18 J -21461301.44 -21461301.32 -21461301.18 0.0083 0.0033  
 Mercury -63471-05-27 05:59 J -21461213.37 -21461213.25 -21461213.13 0.0082 0.0042  
 Mercury -63471-08-23 07:11 J -21461125.30 -21461125.20 -21461125.08 0.0082 0.0052  
 Mercury -63471-11-19 08:37 J -21461037.22 -21461037.14 -21461037.04 0.0082 0.0061  
 Mercury -63470-02-15 10:04 J -21460949.14 -21460949.08 -21460949.00 0.0082 0.0070  
 Mercury -63470-05-14 11:30 J -21460861.04 -21460861.02 -21460860.98 0.0082 0.0079  
 Earth -63468-05-13 01:40 J -21460131.56 -21460131.43 -21460131.27 0.0081 0.0066  
 Moon -63468-05-13 03:21 J -21460131.51 -21460131.36 -21460131.18 0.0081 0.0062 \*  
 Venus -63461-02-11 22:33 J -21457665.69 -21457665.56 -21457665.39 0.0077 0.0054  
 Venus -63461-09-24 07:25 J -21457440.40 -21457440.19 -21457439.97 0.0077 0.0002  
 Venus -63460-05-07 15:35 J -21457214.99 -21457214.85 -21457214.69 0.0076 0.0055  
 Mercury -63321-10-12 17:59 J -21406286.78 -21406286.75 -21406286.68 0.0061 0.0058

Mercury -63320-01-08 19:25 J -21406198.77 -21406198.69 -21406198.60 0.0061 0.0053

Mercury -63320-04-06 20:09 J -21406110.74 -21406110.66 -21406110.53 0.0061 0.0049

Mercury -63320-07-03 21:21 J -21406022.71 -21406022.61 -21406022.47 0.0061 0.0044

Mercury -63320-09-29 22:33 J -21405934.68 -21405934.56 -21405934.41 0.0061 0.0039

Mercury -63320-12-26 23:45 J -21405846.64 -21405846.51 -21405846.35 0.0061 0.0034

Mercury -63319-03-25 00:57 J -21405758.60 -21405758.46 -21405758.29 0.0061 0.0030

Mercury -63319-06-21 02:09 J -21405670.56 -21405670.41 -21405670.23 0.0061 0.0025

Mercury -63319-09-17 03:21 J -21405582.52 -21405582.36 -21405582.18 0.0061 0.0020

Mercury -63319-12-14 04:33 J -21405494.47 -21405494.31 -21405494.13 0.0061 0.0015

Mercury -63318-03-12 05:45 J -21405406.43 -21405406.26 -21405406.07 0.0062 0.0010

Mercury -63318-06-08 07:11 J -21405318.38 -21405318.20 -21405318.02 0.0062 0.0004

Mercury -63318-09-04 08:23 J -21405230.33 -21405230.15 -21405229.97 0.0062 0.0001

Mercury -63318-12-01 09:35 J -21405142.28 -21405142.10 -21405141.92 0.0062 0.0006

Mercury -63317-02-27 10:47 J -21405054.23 -21405054.05 -21405053.87 0.0062 0.0011

Mercury -63317-05-25 11:59 J -21404966.17 -21404966.00 -21404965.82 0.0062 0.0016

Mercury -63317-08-21 12:57 J -21404878.11 -21404877.96 -21404877.78 0.0062 0.0022

Mercury -63317-11-17 14:09 J -21404790.06 -21404789.91 -21404789.73 0.0062 0.0027

Mercury -63316-02-13 15:21 J -21404702.00 -21404701.86 -21404701.69 0.0062 0.0033

Mercury -63316-05-12 16:47 J -21404613.93 -21404613.80 -21404613.65 0.0062 0.0037

Mercury -63316-08-08 18:13 J -21404525.87 -21404525.74 -21404525.61 0.0062 0.0043

Mercury -63316-11-04 19:11 J -21404437.80 -21404437.70 -21404437.57 0.0062 0.0048

Mercury -63315-01-31 20:37 J -21404349.72 -21404349.64 -21404349.54 0.0062 0.0054

Mercury -63315-04-29 22:04 J -21404261.63 -21404261.58 -21404261.52 0.0062 0.0059

Earth -63311-11-08 14:23 J -21402608.14 -21402607.90 -21402607.63 0.0064 0.0014

Moon -63311-11-08 14:52 J -21402608.13 -21402607.88 -21402607.61 0.0064 0.0017 \*

Venus -63301-05-12 12:42 J -21399135.13 -21399134.97 -21399134.77 0.0068 0.0042

Venus -63301-12-23 19:11 J -21398909.93 -21398909.70 -21398909.48 0.0068 0.0003

Venus -63300-08-06 01:11 J -21398684.63 -21398684.45 -21398684.25 0.0068 0.0037

Mercury -63228-05-31 03:06 J -21372453.41 -21372453.37 -21372453.31 0.0084 0.0078

Mercury -63228-08-27 04:33 J -21372365.38 -21372365.31 -21372365.21 0.0084 0.0068

Mercury -63228-11-23 06:13 J -21372277.33 -21372277.24 -21372277.13 0.0084 0.0058

Mercury -63227-02-19 07:54 J -21372189.28 -21372189.17 -21372189.05 0.0084 0.0047

Mercury -63227-05-18 09:35 J -21372101.23 -21372101.10 -21372100.97 0.0084 0.0037

Mercury -63227-08-14 11:01 J -21372013.17 -21372013.04 -21372012.90 0.0083 0.0027

Mercury -63227-11-10 12:42 J -21371925.11 -21371924.97 -21371924.83 0.0083 0.0017

Mercury -63226-02-06 14:09 J -21371837.05 -21371836.91 -21371836.77 0.0083 0.0007

Mercury -63226-05-05 15:35 J -21371748.99 -21371748.85 -21371748.71 0.0083 0.0004

Mercury -63226-08-01 17:01 J -21371660.92 -21371660.79 -21371660.65 0.0083 0.0013

Mercury -63226-10-28 18:28 J -21371572.86 -21371572.73 -21371572.59 0.0083 0.0023

Mercury -63225-01-24 19:54 J -21371484.79 -21371484.67 -21371484.53 0.0083 0.0033

Mercury -63225-04-21 21:21 J -21371396.72 -21371396.61 -21371396.48 0.0082 0.0042

Mercury -63225-07-18 22:47 J -21371308.65 -21371308.55 -21371308.43 0.0082 0.0052

Mercury -63225-10-15 00:13 J -21371220.57 -21371220.49 -21371220.39 0.0082 0.0061

Mercury -63224-01-11 01:40 J -21371132.49 -21371132.43 -21371132.35 0.0082 0.0070

Mercury -63224-04-09 02:52 J -21371044.39 -21371044.38 -21371044.33 0.0082 0.0080

Moon -63222-05-15 05:59 J -21370278.47 -21370278.25 -21370277.99 0.0081 0.0031

Earth -63222-05-15 09:49 J -21370278.31 -21370278.09 -21370277.85 0.0081 0.0035 \*

Venus -63215-03-12 12:13 J -21367785.16 -21367784.99 -21367784.79 0.0077 0.0038

Venus -63215-10-23 20:52 J -21367559.84 -21367559.63 -21367559.41 0.0077 0.0017

Venus -63214-06-06 04:47 J -21367334.36 -21367334.30 -21367334.20 0.0076 0.0071

Mercury -63075-09-08 08:37 J -21316470.18 -21316470.14 -21316470.07 0.0061 0.0058

Mercury -63075-12-05 09:49 J -21316382.16 -21316382.09 -21316381.99 0.0061 0.0053

Mercury -63074-03-03 11:16 J -21316294.14 -21316294.03 -21316293.92 0.0061 0.0048

Mercury -63074-05-30 11:45 J -21316206.11 -21316206.01 -21316205.86 0.0061 0.0045

Mercury -63074-08-26 13:11 J -21316118.07 -21316117.95 -21316117.80 0.0061 0.0039

Mercury -63074-11-22 14:23 J -21316030.03 -21316029.90 -21316029.74 0.0061 0.0034

Mercury -63073-02-18 15:35 J -21315941.99 -21315941.85 -21315941.68 0.0061 0.0029

Mercury -63073-05-16 16:47 J -21315853.95 -21315853.80 -21315853.62 0.0061 0.0025

Mercury -63073-08-12 17:59 J -21315765.91 -21315765.75 -21315765.57 0.0061 0.0020

Mercury -63073-11-08 19:11 J -21315677.86 -21315677.70 -21315677.52 0.0061 0.0015

Mercury	-63072-02-04 20:23 J	-21315589.82	-21315589.65	-21315589.46	0.0062	0.0010
Mercury	-63072-05-03 21:49 J	-21315501.77	-21315501.59	-21315501.41	0.0062	0.0004
Mercury	-63072-07-30 23:01 J	-21315413.72	-21315413.54	-21315413.36	0.0062	0.0001
Mercury	-63072-10-27 00:13 J	-21315325.67	-21315325.49	-21315325.31	0.0062	0.0006
Mercury	-63071-01-23 01:25 J	-21315237.61	-21315237.44	-21315237.26	0.0062	0.0011
Mercury	-63071-04-21 02:37 J	-21315149.56	-21315149.39	-21315149.21	0.0062	0.0016
Mercury	-63071-07-18 03:49 J	-21315061.50	-21315061.34	-21315061.16	0.0062	0.0021
Mercury	-63071-10-14 04:47 J	-21314973.44	-21314973.30	-21314973.12	0.0062	0.0027
Mercury	-63070-01-10 06:13 J	-21314885.38	-21314885.24	-21314885.07	0.0062	0.0032
Mercury	-63070-04-08 07:25 J	-21314797.32	-21314797.19	-21314797.03	0.0062	0.0037
Mercury	-63070-07-05 08:52 J	-21314709.25	-21314709.13	-21314708.99	0.0062	0.0043
Mercury	-63070-10-01 10:18 J	-21314621.18	-21314621.07	-21314620.95	0.0062	0.0048
Mercury	-63070-12-28 11:01 J	-21314533.11	-21314533.04	-21314532.92	0.0062	0.0054
Mercury	-63069-03-25 12:42 J	-21314445.02	-21314444.97	-21314444.90	0.0063	0.0059
Moon	-63065-11-09 18:13 J	-21312755.00	-21312754.74	-21312754.48	0.0064	0.0003
Earth	-63065-11-09 21:35 J	-21312754.85	-21312754.60	-21312754.34	0.0064	0.0006 *
Mars	-63061-02-05 05:01 J	-21311572.63	-21311572.29	-21311571.95	0.0065	0.0003
Venus	-63055-06-11 01:40 J	-21309254.62	-21309254.43	-21309254.22	0.0068	0.0029
Venus	-63054-01-22 07:54 J	-21309029.39	-21309029.17	-21309028.95	0.0068	0.0010
Venus	-63054-09-04 13:40 J	-21308804.06	-21308803.93	-21308803.76	0.0068	0.0050

# 63RD MILLENNIUM BCE

This is a list of transits visible from Pluto in the 63rd millennium BCE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Mercury -62982-04-26 19:25 J -21282636.75 -21282636.69 -21282636.63 0.0084 0.0075  
Mercury -62982-07-23 20:52 J -21282548.71 -21282548.63 -21282548.54 0.0084 0.0065  
Mercury -62982-10-19 22:18 J -21282460.67 -21282460.57 -21282460.45 0.0084 0.0055  
Mercury -62981-01-15 23:59 J -21282372.61 -21282372.50 -21282372.37 0.0084 0.0044  
Mercury -62981-04-13 01:25 J -21282284.56 -21282284.44 -21282284.30 0.0083 0.0035  
Mercury -62981-07-10 03:06 J -21282196.50 -21282196.37 -21282196.23 0.0083 0.0024  
Mercury -62981-10-06 04:47 J -21282108.44 -21282108.30 -21282108.16 0.0083 0.0014  
Mercury -62980-01-02 06:13 J -21282020.38 -21282020.24 -21282020.10 0.0083 0.0004  
Mercury -62980-03-31 07:40 J -21281932.32 -21281932.18 -21281932.03 0.0083 0.0006  
Mercury -62980-06-27 09:06 J -21281844.25 -21281844.12 -21281843.97 0.0083 0.0016  
Mercury -62980-09-23 10:33 J -21281756.19 -21281756.06 -21281755.92 0.0083 0.0026  
Mercury -62980-12-20 12:13 J -21281668.12 -21281667.99 -21281667.86 0.0083 0.0035  
Mercury -62979-03-18 13:25 J -21281580.05 -21281579.94 -21281579.81 0.0082 0.0045  
Mercury -62979-06-14 14:52 J -21281491.98 -21281491.88 -21281491.77 0.0082 0.0054  
Mercury -62979-09-10 16:18 J -21281403.90 -21281403.82 -21281403.72 0.0082 0.0063  
Mercury -62979-12-07 17:59 J -21281315.82 -21281315.75 -21281315.69 0.0082 0.0073  
Mercury -62978-03-05 19:11 J -21281227.70 -21281227.70 -21281227.69 0.0082 0.0082  
Moon -62976-05-16 19:11 J -21280424.94 -21280424.70 -21280424.44 0.0081 0.0010  
Earth -62976-05-16 20:23 J -21280424.91 -21280424.65 -21280424.39 0.0081 0.0005 \*  
Mars -62974-09-03 07:25 J -21279585.41 -21279585.19 -21279584.92 0.0079 0.0044  
Venus -62970-08-28 18:28 J -21278129.79 -21278129.73 -21278129.64 0.0077 0.0072  
Venus -62969-04-10 03:21 J -21277904.56 -21277904.36 -21277904.14 0.0077 0.0017  
Venus -62969-11-21 11:30 J -21277679.19 -21277679.02 -21277678.82 0.0076 0.0038  
Mercury -62829-08-03 22:47 J -21226653.57 -21226653.55 -21226653.49 0.0061 0.0059  
Mercury -62829-10-31 00:13 J -21226565.56 -21226565.49 -21226565.41 0.0061 0.0054  
Mercury -62828-01-27 00:57 J -21226477.54 -21226477.46 -21226477.34 0.0061 0.0050  
Mercury -62828-04-25 02:09 J -21226389.51 -21226389.41 -21226389.27 0.0061 0.0045  
Mercury -62828-07-22 03:21 J -21226301.48 -21226301.36 -21226301.21 0.0061 0.0040

Mercury -62828-10-18 04:33 J -21226213.44 -21226213.31 -21226213.15 0.0061 0.0036

Mercury -62827-01-14 05:45 J -21226125.40 -21226125.26 -21226125.09 0.0061 0.0031

Mercury -62827-04-12 06:57 J -21226037.36 -21226037.21 -21226037.04 0.0061 0.0026

Mercury -62827-07-09 08:09 J -21225949.32 -21225949.16 -21225948.98 0.0061 0.0021

Mercury -62827-10-05 09:21 J -21225861.27 -21225861.11 -21225860.93 0.0061 0.0016

Mercury -62826-01-01 10:47 J -21225773.23 -21225773.05 -21225772.87 0.0062 0.0011

Mercury -62826-03-30 11:59 J -21225685.18 -21225685.00 -21225684.82 0.0062 0.0006

Mercury -62826-06-26 13:11 J -21225597.13 -21225596.95 -21225596.77 0.0062 0.0001

Mercury -62826-09-22 14:23 J -21225509.08 -21225508.90 -21225508.72 0.0062 0.0005

Mercury -62826-12-19 15:35 J -21225421.03 -21225420.85 -21225420.67 0.0062 0.0010

Mercury -62825-03-16 16:47 J -21225332.97 -21225332.80 -21225332.62 0.0062 0.0015

Mercury -62825-06-12 17:59 J -21225244.91 -21225244.75 -21225244.57 0.0062 0.0020

Mercury -62825-09-08 19:11 J -21225156.86 -21225156.70 -21225156.53 0.0062 0.0025

Mercury -62825-12-05 20:23 J -21225068.80 -21225068.65 -21225068.48 0.0062 0.0031

Mercury -62824-03-03 21:49 J -21224980.73 -21224980.59 -21224980.44 0.0062 0.0036

Mercury -62824-05-30 22:47 J -21224892.67 -21224892.55 -21224892.40 0.0062 0.0041

Mercury -62824-08-26 23:59 J -21224804.60 -21224804.50 -21224804.36 0.0062 0.0047

Mercury -62824-11-23 01:25 J -21224716.53 -21224716.44 -21224716.33 0.0062 0.0052

Mercury -62823-02-19 02:23 J -21224628.44 -21224628.40 -21224628.30 0.0062 0.0058

Mercury -62823-05-18 04:18 J -21224540.32 -21224540.32 -21224540.31 0.0063 0.0062

Moon -62820-11-10 14:52 J -21223267.93 -21223267.88 -21223267.78 0.0064 0.0061

Earth -62820-11-10 14:09 J -21223267.91 -21223267.91 -21223267.86 0.0064 0.0064 \*

Earth -62819-11-12 02:09 J -21222901.64 -21222901.41 -21222901.15 0.0064 0.0019

Moon -62819-11-12 03:21 J -21222901.59 -21222901.36 -21222901.11 0.0064 0.0017 \*

Venus -62810-11-27 06:57 J -21219599.31 -21219599.21 -21219599.11 0.0068 0.0060

Venus -62809-07-09 12:42 J -21219374.18 -21219373.97 -21219373.75 0.0068 0.0021

Venus -62808-02-19 18:42 J -21219148.93 -21219148.72 -21219148.49 0.0068 0.0018

Venus -62808-10-03 00:42 J -21218923.56 -21218923.47 -21218923.33 0.0068 0.0059

Mercury -62736-03-22 10:18 J -21192820.12 -21192820.07 -21192820.02 0.0084 0.0077

Mercury -62736-06-18 11:45 J -21192732.09 -21192732.01 -21192731.92 0.0084 0.0067

Mercury -62736-09-14 13:11 J -21192644.04 -21192643.95 -21192643.83 0.0084 0.0057

Mercury -62736-12-11 14:52 J -21192555.99 -21192555.88 -21192555.76 0.0084 0.0047

Mercury -62735-03-09 16:18 J -21192467.94 -21192467.82 -21192467.68 0.0083 0.0037

Mercury -62735-06-05 17:59 J -21192379.88 -21192379.75 -21192379.61 0.0083 0.0026

Mercury -62735-09-01 19:40 J -21192291.82 -21192291.68 -21192291.54 0.0083 0.0016

Mercury -62735-11-28 21:06 J -21192203.76 -21192203.62 -21192203.47 0.0083 0.0007

Mercury -62734-02-24 22:47 J -21192115.69 -21192115.55 -21192115.41 0.0083 0.0004

Mercury -62734-05-24 00:13 J -21192027.63 -21192027.49 -21192027.35 0.0083 0.0013

Mercury -62734-08-20 01:40 J -21191939.56 -21191939.43 -21191939.29 0.0083 0.0023

Mercury -62734-11-16 03:06 J -21191851.50 -21191851.37 -21191851.24 0.0083 0.0033

Mercury -62733-02-12 04:18 J -21191763.43 -21191763.32 -21191763.19 0.0082 0.0043

Mercury -62733-05-10 05:59 J -21191675.35 -21191675.25 -21191675.14 0.0082 0.0052

Mercury -62733-08-06 07:11 J -21191587.28 -21191587.20 -21191587.09 0.0082 0.0061

Mercury -62733-11-02 08:37 J -21191499.20 -21191499.14 -21191499.06 0.0082 0.0070

Mercury -62732-01-29 10:18 J -21191411.10 -21191411.07 -21191411.04 0.0082 0.0079

Earth -62730-05-19 01:25 J -21190571.68 -21190571.44 -21190571.19 0.0081 0.0025

Moon -62730-05-19 04:47 J -21190571.52 -21190571.30 -21190571.04 0.0081 0.0030 \*

Venus -62724-09-26 06:13 J -21188249.35 -21188249.24 -21188249.09 0.0077 0.0062

Venus -62723-05-09 15:06 J -21188024.08 -21188023.87 -21188023.65 0.0077 0.0007

Venus -62723-12-20 23:45 J -21187798.68 -21187798.51 -21187798.35 0.0076 0.0048

Mercury -62583-06-30 13:11 J -21136836.95 -21136836.95 -21136836.93 0.0061 0.0061

Mercury -62583-09-26 14:09 J -21136748.96 -21136748.91 -21136748.83 0.0061 0.0056

Mercury -62583-12-23 15:21 J -21136660.94 -21136660.86 -21136660.75 0.0061 0.0051

Mercury -62582-03-21 16:33 J -21136572.91 -21136572.81 -21136572.69 0.0061 0.0047

Mercury -62582-06-17 17:16 J -21136484.88 -21136484.78 -21136484.62 0.0061 0.0043

Mercury -62582-09-13 18:28 J -21136396.85 -21136396.73 -21136396.57 0.0061 0.0038

Mercury -62582-12-10 19:40 J -21136308.81 -21136308.68 -21136308.51 0.0061 0.0033

Mercury -62581-03-07 21:06 J -21136220.77 -21136220.62 -21136220.45 0.0061 0.0027

Mercury -62581-06-03 22:18 J -21136132.73 -21136132.57 -21136132.40 0.0061 0.0022

Mercury -62581-08-30 23:30 J -21136044.68 -21136044.52 -21136044.34 0.0061 0.0017



Mercury -62581-11-27 00:42 J -21135956.64 -21135956.47 -21135956.29 0.0062 0.0012

Mercury -62580-02-23 01:54 J -21135868.59 -21135868.42 -21135868.24 0.0062 0.0007

Mercury -62580-05-22 03:06 J -21135780.54 -21135780.37 -21135780.19 0.0062 0.0003

Mercury -62580-08-18 04:33 J -21135692.49 -21135692.31 -21135692.14 0.0062 0.0003

Mercury -62580-11-14 05:30 J -21135604.44 -21135604.27 -21135604.09 0.0062 0.0008

Mercury -62579-02-10 06:42 J -21135516.39 -21135516.22 -21135516.04 0.0062 0.0013

Mercury -62579-05-09 08:09 J -21135428.33 -21135428.16 -21135427.99 0.0062 0.0018

Mercury -62579-08-05 09:21 J -21135340.28 -21135340.11 -21135339.94 0.0062 0.0023

Mercury -62579-11-01 10:18 J -21135252.22 -21135252.07 -21135251.90 0.0062 0.0029

Mercury -62578-01-28 11:30 J -21135164.16 -21135164.02 -21135163.86 0.0062 0.0034

Mercury -62578-04-26 12:42 J -21135076.09 -21135075.97 -21135075.81 0.0062 0.0040

Mercury -62578-07-23 14:09 J -21134988.02 -21134987.91 -21134987.77 0.0062 0.0045

Mercury -62578-10-19 15:06 J -21134899.95 -21134899.87 -21134899.74 0.0062 0.0051

Mercury -62577-01-15 16:33 J -21134811.87 -21134811.81 -21134811.71 0.0063 0.0056

Mercury -62577-04-12 17:59 J -21134723.78 -21134723.75 -21134723.70 0.0063 0.0061

Moon -62574-11-12 15:21 J -21133415.00 -21133414.86 -21133414.67 0.0064 0.0049

Earth -62574-11-12 18:42 J -21133414.84 -21133414.72 -21133414.52 0.0064 0.0051 \*

Earth -62573-11-13 06:57 J -21133048.42 -21133048.21 -21133047.97 0.0064 0.0032

Moon -62573-11-13 09:49 J -21133048.30 -21133048.09 -21133047.83 0.0064 0.0031 \*

Venus -62564-12-25 17:45 J -21129718.89 -21129718.76 -21129718.61 0.0068 0.0052

Venus -62563-08-07 23:59 J -21129493.72 -21129493.50 -21129493.27 0.0068 0.0013

Venus -62562-03-21 05:45 J -21129268.45 -21129268.26 -21129268.03 0.0068 0.0028

Venus -62562-11-01 11:59 J -21129043.01 -21129043.00 -21129042.94 0.0068 0.0068

Mercury -62490-02-16 01:25 J -21103003.48 -21103003.44 -21103003.38 0.0084 0.0078

Mercury -62490-05-15 02:52 J -21102915.45 -21102915.38 -21102915.28 0.0084 0.0068

Mercury -62490-08-11 04:33 J -21102827.40 -21102827.31 -21102827.20 0.0084 0.0058

Mercury -62490-11-07 06:28 J -21102739.35 -21102739.23 -21102739.12 0.0084 0.0047

Mercury -62489-02-03 07:54 J -21102651.30 -21102651.17 -21102651.04 0.0083 0.0037

Mercury -62489-05-01 09:21 J -21102563.24 -21102563.11 -21102562.97 0.0083 0.0027

Mercury -62489-07-28 10:47 J -21102475.18 -21102475.05 -21102474.90 0.0083 0.0018

Mercury -62489-10-24 12:28 J -21102387.12 -21102386.98 -21102386.83 0.0083 0.0007

Mercury -62488-01-20 14:09 J -21102299.06 -21102298.91 -21102298.77 0.0083 0.0004

Mercury -62488-04-18 15:35 J -21102210.99 -21102210.85 -21102210.71 0.0083 0.0013

Mercury -62488-07-15 17:01 J -21102122.93 -21102122.79 -21102122.65 0.0083 0.0022

Mercury -62488-10-11 18:13 J -21102034.86 -21102034.74 -21102034.60 0.0083 0.0033

Mercury -62487-01-07 19:54 J -21101946.79 -21101946.67 -21101946.54 0.0082 0.0042

Mercury -62487-04-05 21:06 J -21101858.72 -21101858.62 -21101858.50 0.0082 0.0051

Mercury -62487-07-02 22:47 J -21101770.64 -21101770.55 -21101770.45 0.0082 0.0060

Mercury -62487-09-29 00:13 J -21101682.56 -21101682.49 -21101682.41 0.0082 0.0069

Mercury -62487-12-26 01:25 J -21101594.46 -21101594.44 -21101594.39 0.0082 0.0079

Earth -62484-05-20 08:37 J -21100718.32 -21100718.14 -21100717.93 0.0081 0.0052

Moon -62484-05-20 08:37 J -21100718.32 -21100718.14 -21100717.93 0.0081 0.0055 \*

Venus -62478-10-25 19:11 J -21098368.85 -21098368.70 -21098368.51 0.0077 0.0047

Venus -62477-06-07 03:49 J -21098143.55 -21098143.34 -21098143.12 0.0077 0.0009

Venus -62476-01-18 11:59 J -21097918.11 -21097918.00 -21097917.87 0.0076 0.0062

Mercury -62337-08-22 03:49 J -21046932.37 -21046932.34 -21046932.27 0.0061 0.0058

Mercury -62337-11-18 05:16 J -21046844.36 -21046844.28 -21046844.19 0.0061 0.0053

Mercury -62336-02-14 05:59 J -21046756.33 -21046756.25 -21046756.12 0.0061 0.0049

Mercury -62336-05-13 07:11 J -21046668.30 -21046668.20 -21046668.06 0.0061 0.0044

Mercury -62336-08-09 08:23 J -21046580.27 -21046580.15 -21046580.00 0.0061 0.0040

Mercury -62336-11-05 09:35 J -21046492.23 -21046492.10 -21046491.94 0.0061 0.0035

Mercury -62335-02-01 11:01 J -21046404.19 -21046404.04 -21046403.88 0.0061 0.0030

Mercury -62335-04-30 12:13 J -21046316.15 -21046315.99 -21046315.83 0.0061 0.0025

Mercury -62335-07-27 13:25 J -21046228.11 -21046227.94 -21046227.77 0.0061 0.0020

Mercury -62335-10-23 14:37 J -21046140.06 -21046139.89 -21046139.72 0.0062 0.0015

Mercury -62334-01-19 15:49 J -21046052.02 -21046051.84 -21046051.66 0.0062 0.0010

Mercury -62334-04-17 17:01 J -21045963.97 -21045963.79 -21045963.61 0.0062 0.0005

Mercury -62334-07-14 18:13 J -21045875.92 -21045875.74 -21045875.56 0.0062 0.0001

Mercury -62334-10-10 19:25 J -21045787.87 -21045787.69 -21045787.51 0.0062 0.0005

Mercury -62333-01-06 20:37 J -21045699.82 -21045699.64 -21045699.46 0.0062 0.0010

Mercury -62333-04-03 21:49 J -21045611.76 -21045611.59 -21045611.42 0.0062 0.0015

Mercury -62333-06-30 22:47 J -21045523.71 -21045523.55 -21045523.37 0.0062 0.0021

Mercury -62333-09-26 23:59 J -21045435.65 -21045435.50 -21045435.32 0.0062 0.0026

Mercury -62333-12-24 01:11 J -21045347.59 -21045347.45 -21045347.28 0.0062 0.0031

Mercury -62332-03-22 02:23 J -21045259.53 -21045259.40 -21045259.24 0.0062 0.0037

Mercury -62332-06-18 03:49 J -21045171.46 -21045171.34 -21045171.20 0.0062 0.0042

Mercury -62332-09-14 05:16 J -21045083.39 -21045083.28 -21045083.16 0.0062 0.0047

Mercury -62332-12-11 05:59 J -21044995.32 -21044995.25 -21044995.13 0.0062 0.0053

Mercury -62331-03-09 07:25 J -21044907.24 -21044907.19 -21044907.10 0.0063 0.0058

Earth -62328-11-13 22:18 J -21043561.76 -21043561.57 -21043561.37 0.0064 0.0042

Moon -62328-11-13 22:18 J -21043561.73 -21043561.57 -21043561.35 0.0064 0.0042 \*

Moon -62327-11-15 07:25 J -21043195.38 -21043195.19 -21043194.96 0.0064 0.0041

Earth -62327-11-15 10:04 J -21043195.26 -21043195.08 -21043194.86 0.0064 0.0040 \*

Mars -62324-05-20 08:37 J -21042278.40 -21042278.14 -21042277.81 0.0065 0.0031

Venus -62317-01-24 03:06 J -21039838.51 -21039838.37 -21039838.19 0.0068 0.0048

Venus -62317-09-05 09:35 J -21039613.32 -21039613.10 -21039612.87 0.0068 0.0008

Venus -62316-04-18 15:21 J -21039388.04 -21039387.86 -21039387.64 0.0068 0.0032

Mercury -62244-01-11 15:35 J -21013186.85 -21013186.85 -21013186.83 0.0084 0.0084

Mercury -62244-04-09 17:16 J -21013098.84 -21013098.78 -21013098.70 0.0084 0.0073

Mercury -62244-07-06 18:57 J -21013010.80 -21013010.71 -21013010.61 0.0084 0.0063

Mercury -62244-10-02 20:23 J -21012922.75 -21012922.65 -21012922.53 0.0084 0.0053

Mercury -62244-12-29 22:04 J -21012834.70 -21012834.58 -21012834.45 0.0083 0.0042

Mercury -62243-03-27 23:30 J -21012746.64 -21012746.52 -21012746.38 0.0083 0.0033

Mercury -62243-06-24 01:11 J -21012658.58 -21012658.45 -21012658.31 0.0083 0.0022

Mercury -62243-09-20 02:52 J -21012570.52 -21012570.38 -21012570.24 0.0083 0.0012

Mercury -62243-12-17 04:18 J -21012482.46 -21012482.32 -21012482.18 0.0083 0.0003

Mercury -62242-03-15 05:45 J -21012394.40 -21012394.26 -21012394.11 0.0083 0.0008

Mercury -62242-06-11 07:11 J -21012306.33 -21012306.20 -21012306.05 0.0083 0.0018

Mercury -62242-09-07 08:52 J -21012218.27 -21012218.13 -21012218.00 0.0083 0.0027

Mercury -62242-12-04 10:04 J -21012130.20 -21012130.08 -21012129.94 0.0082 0.0037

Mercury -62241-03-01 11:45 J -21012042.13 -21012042.01 -21012041.89 0.0082 0.0046  
 Mercury -62241-05-28 12:57 J -21011954.05 -21011953.96 -21011953.85 0.0082 0.0055  
 Mercury -62241-08-24 14:23 J -21011865.98 -21011865.90 -21011865.80 0.0082 0.0065  
 Mercury -62241-11-20 15:35 J -21011777.89 -21011777.85 -21011777.77 0.0082 0.0074  
 Moon -62238-05-22 06:13 J -21010865.38 -21010865.24 -21010865.05 0.0081 0.0062  
 Earth -62238-05-22 10:18 J -21010865.24 -21010865.07 -21010864.89 0.0081 0.0059 \*  
 Mars -62237-12-17 17:16 J -21010290.04 -21010289.78 -21010289.50 0.0080 0.0032  
 Venus -62232-11-23 05:30 J -21008488.44 -21008488.27 -21008488.08 0.0077 0.0042  
 Venus -62231-07-06 14:09 J -21008263.13 -21008262.91 -21008262.70 0.0077 0.0013  
 Venus -62230-02-16 21:49 J -21008037.67 -21008037.59 -21008037.47 0.0076 0.0067  
 Mercury -62091-10-14 18:57 J -20957027.78 -20957027.71 -20957027.65 0.0061 0.0056  
 Mercury -62090-01-10 19:25 J -20956939.76 -20956939.69 -20956939.57 0.0061 0.0052  
 Mercury -62090-04-08 20:52 J -20956851.73 -20956851.63 -20956851.51 0.0061 0.0047  
 Mercury -62090-07-05 22:04 J -20956763.70 -20956763.58 -20956763.44 0.0061 0.0042  
 Mercury -62090-10-01 23:16 J -20956675.66 -20956675.53 -20956675.38 0.0061 0.0038  
 Mercury -62090-12-29 00:28 J -20956587.62 -20956587.48 -20956587.32 0.0061 0.0033  
 Mercury -62089-03-26 01:25 J -20956499.58 -20956499.44 -20956499.27 0.0061 0.0028  
 Mercury -62089-06-22 02:37 J -20956411.54 -20956411.39 -20956411.21 0.0061 0.0023  
 Mercury -62089-09-18 03:49 J -20956323.50 -20956323.34 -20956323.16 0.0062 0.0019  
 Mercury -62089-12-15 05:01 J -20956235.45 -20956235.29 -20956235.10 0.0062 0.0014  
 Mercury -62088-03-13 06:13 J -20956147.41 -20956147.24 -20956147.05 0.0062 0.0009  
 Mercury -62088-06-09 07:40 J -20956059.36 -20956059.18 -20956059.00 0.0062 0.0003  
 Mercury -62088-09-05 08:52 J -20955971.31 -20955971.13 -20955970.95 0.0062 0.0002  
 Mercury -62088-12-02 10:04 J -20955883.26 -20955883.08 -20955882.90 0.0062 0.0007  
 Mercury -62087-02-28 11:16 J -20955795.20 -20955795.03 -20955794.85 0.0062 0.0012  
 Mercury -62087-05-27 12:28 J -20955707.15 -20955706.98 -20955706.80 0.0062 0.0017  
 Mercury -62087-08-23 13:40 J -20955619.09 -20955618.93 -20955618.76 0.0062 0.0022  
 Mercury -62087-11-19 14:52 J -20955531.03 -20955530.88 -20955530.71 0.0062 0.0028  
 Mercury -62086-02-15 16:18 J -20955442.97 -20955442.82 -20955442.67 0.0062 0.0033  
 Mercury -62086-05-14 17:01 J -20955354.91 -20955354.79 -20955354.63 0.0062 0.0039

Mercury -62086-08-10 18:28 J -20955266.84 -20955266.73 -20955266.59 0.0062 0.0043

Mercury -62086-11-06 19:40 J -20955178.77 -20955178.68 -20955178.55 0.0062 0.0049

Mercury -62085-02-02 21:06 J -20955090.70 -20955090.62 -20955090.52 0.0063 0.0054

Mercury -62085-04-30 22:04 J -20955002.61 -20955002.58 -20955002.50 0.0063 0.0060

Earth -62082-11-16 00:42 J -20953708.68 -20953708.47 -20953708.25 0.0064 0.0036

Moon -62082-11-16 04:18 J -20953708.53 -20953708.32 -20953708.10 0.0064 0.0036 \*

Moon -62081-11-16 10:33 J -20953342.21 -20953342.06 -20953341.87 0.0064 0.0047

Earth -62081-11-16 12:13 J -20953342.14 -20953341.99 -20953341.79 0.0064 0.0046 \*

Mars -62078-10-11 14:37 J -20952283.08 -20952282.89 -20952282.61 0.0065 0.0048

Venus -62071-02-21 12:42 J -20949958.13 -20949957.97 -20949957.78 0.0068 0.0044

Venus -62071-10-04 19:11 J -20949732.92 -20949732.70 -20949732.47 0.0068 0.0004

Venus -62070-05-18 00:42 J -20949507.64 -20949507.47 -20949507.25 0.0068 0.0037

# 62ND MILLENNIUM BCE

This is a list of transits visible from Pluto in the 62nd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-61998-03-06 07:54 J	-20923282.22	-20923282.17	-20923282.11	0.0084	0.0077		
Mercury	-61998-06-02 09:21 J	-20923194.18	-20923194.11	-20923194.01	0.0084	0.0067		
Mercury	-61998-08-29 11:01 J	-20923106.13	-20923106.04	-20923105.92	0.0084	0.0057		
Mercury	-61998-11-25 12:28 J	-20923018.08	-20923017.98	-20923017.85	0.0083	0.0047		
Mercury	-61997-02-21 14:09 J	-20922930.03	-20922929.91	-20922929.77	0.0083	0.0037		
Mercury	-61997-05-19 15:49 J	-20922841.97	-20922841.84	-20922841.70	0.0083	0.0026		

Mercury -61997-08-15 17:30 J -20922753.91 -20922753.77 -20922753.63 0.0083 0.0016

Mercury -61997-11-11 18:57 J -20922665.85 -20922665.71 -20922665.56 0.0083 0.0006

Mercury -61996-02-07 20:37 J -20922577.79 -20922577.64 -20922577.50 0.0083 0.0004

Mercury -61996-05-06 22:04 J -20922489.72 -20922489.58 -20922489.44 0.0083 0.0013

Mercury -61996-08-02 23:30 J -20922401.65 -20922401.52 -20922401.38 0.0083 0.0023

Mercury -61996-10-30 00:57 J -20922313.59 -20922313.46 -20922313.33 0.0082 0.0032

Mercury -61995-01-26 02:09 J -20922225.52 -20922225.41 -20922225.28 0.0082 0.0042

Mercury -61995-04-24 03:49 J -20922137.45 -20922137.34 -20922137.23 0.0082 0.0051

Mercury -61995-07-21 05:16 J -20922049.37 -20922049.28 -20922049.18 0.0082 0.0060

Mercury -61995-10-17 06:28 J -20921961.29 -20921961.23 -20921961.14 0.0082 0.0070

Mercury -61994-01-13 07:54 J -20921873.19 -20921873.17 -20921873.12 0.0082 0.0079

Earth -61992-05-23 13:25 J -20921012.04 -20921011.94 -20921011.81 0.0080 0.0072

Moon -61992-05-23 15:06 J -20921011.96 -20921011.87 -20921011.76 0.0080 0.0073 \*

Venus -61986-12-22 16:18 J -20918607.99 -20918607.82 -20918607.61 0.0077 0.0035

Venus -61985-08-04 00:57 J -20918382.66 -20918382.46 -20918382.24 0.0076 0.0021

Venus -61984-03-17 08:52 J -20918157.14 -20918157.13 -20918157.07 0.0076 0.0075

Mercury -61845-09-09 07:54 J -20867211.19 -20867211.17 -20867211.15 0.0061 0.0060

Mercury -61845-12-06 08:37 J -20867123.19 -20867123.14 -20867123.05 0.0061 0.0056

Mercury -61844-03-04 09:49 J -20867035.17 -20867035.09 -20867034.98 0.0061 0.0051

Mercury -61844-05-31 11:01 J -20866947.14 -20866947.04 -20866946.91 0.0061 0.0047

Mercury -61844-08-27 12:28 J -20866859.11 -20866858.98 -20866858.85 0.0061 0.0042

Mercury -61844-11-23 13:11 J -20866771.07 -20866770.95 -20866770.79 0.0061 0.0037

Mercury -61843-02-19 14:23 J -20866683.03 -20866682.90 -20866682.73 0.0061 0.0032

Mercury -61843-05-18 15:35 J -20866594.99 -20866594.85 -20866594.68 0.0061 0.0028

Mercury -61843-08-14 16:47 J -20866506.95 -20866506.80 -20866506.62 0.0061 0.0023

Mercury -61843-11-10 17:59 J -20866418.91 -20866418.75 -20866418.57 0.0062 0.0018

Mercury -61842-02-06 19:11 J -20866330.86 -20866330.70 -20866330.51 0.0062 0.0013

Mercury -61842-05-05 20:37 J -20866242.82 -20866242.64 -20866242.46 0.0062 0.0008

Mercury -61842-08-01 21:49 J -20866154.77 -20866154.59 -20866154.41 0.0062 0.0003

Mercury -61842-10-28 23:01 J -20866066.72 -20866066.54 -20866066.36 0.0062 0.0003

Mercury -61841-01-25 00:13 J -20865978.67 -20865978.49 -20865978.31 0.0062 0.0008

Mercury -61841-04-22 01:11 J -20865890.61 -20865890.45 -20865890.26 0.0062 0.0013

Mercury -61841-07-19 02:23 J -20865802.56 -20865802.40 -20865802.21 0.0062 0.0018

Mercury -61841-10-15 03:35 J -20865714.50 -20865714.35 -20865714.17 0.0062 0.0024

Mercury -61840-01-11 05:01 J -20865626.44 -20865626.29 -20865626.12 0.0062 0.0028

Mercury -61840-04-09 06:13 J -20865538.38 -20865538.24 -20865538.08 0.0062 0.0033

Mercury -61840-07-06 07:25 J -20865450.32 -20865450.19 -20865450.04 0.0062 0.0039

Mercury -61840-10-02 08:52 J -20865362.25 -20865362.13 -20865362.00 0.0062 0.0044

Mercury -61840-12-29 09:49 J -20865274.18 -20865274.09 -20865273.96 0.0062 0.0050

Mercury -61839-03-27 11:01 J -20865186.10 -20865186.04 -20865185.93 0.0063 0.0055

Mercury -61839-06-23 12:28 J -20865098.01 -20865097.98 -20865097.91 0.0063 0.0060

Moon -61836-11-16 23:30 J -20863855.72 -20863855.52 -20863855.28 0.0064 0.0036

Earth -61836-11-17 01:11 J -20863855.64 -20863855.45 -20863855.21 0.0064 0.0035 \*

Earth -61835-11-18 13:11 J -20863489.11 -20863488.95 -20863488.76 0.0064 0.0047

Moon -61835-11-18 16:47 J -20863488.95 -20863488.80 -20863488.63 0.0064 0.0049 \*

Venus -61825-03-21 21:06 J -20860077.78 -20860077.62 -20860077.44 0.0068 0.0044

Venus -61825-11-02 03:21 J -20859852.58 -20859852.36 -20859852.13 0.0068 0.0004

Venus -61824-06-15 09:06 J -20859627.29 -20859627.12 -20859626.91 0.0068 0.0036

Mercury -61752-04-27 23:01 J -20833377.59 -20833377.54 -20833377.47 0.0084 0.0075

Mercury -61752-07-25 00:42 J -20833289.55 -20833289.47 -20833289.38 0.0084 0.0065

Mercury -61752-10-21 02:09 J -20833201.51 -20833201.41 -20833201.29 0.0084 0.0055

Mercury -61751-01-17 03:49 J -20833113.45 -20833113.34 -20833113.21 0.0083 0.0045

Mercury -61751-04-15 05:30 J -20833025.40 -20833025.27 -20833025.14 0.0083 0.0034

Mercury -61751-07-12 07:11 J -20832937.34 -20832937.20 -20832937.07 0.0083 0.0024

Mercury -61751-10-08 08:37 J -20832849.28 -20832849.14 -20832849.00 0.0083 0.0014

Mercury -61750-01-04 10:04 J -20832761.22 -20832761.08 -20832760.93 0.0083 0.0006

Mercury -61750-04-02 11:45 J -20832673.15 -20832673.01 -20832672.87 0.0083 0.0005

Mercury -61750-06-29 13:11 J -20832585.09 -20832584.95 -20832584.81 0.0083 0.0015

Mercury -61750-09-25 14:37 J -20832497.02 -20832496.89 -20832496.75 0.0082 0.0024

Mercury -61750-12-22 16:04 J -20832408.95 -20832408.83 -20832408.70 0.0082 0.0034

Mercury -61749-03-19 17:30 J -20832320.88 -20832320.77 -20832320.64 0.0082 0.0043

Mercury -61749-06-15 18:57 J -20832232.81 -20832232.71 -20832232.60 0.0082 0.0052

Mercury -61749-09-11 20:37 J -20832144.74 -20832144.64 -20832144.55 0.0082 0.0061

Mercury -61749-12-08 21:35 J -20832056.65 -20832056.60 -20832056.52 0.0082 0.0071

Mercury -61748-03-06 23:01 J -20831968.55 -20831968.54 -20831968.50 0.0082 0.0080

Earth -61746-05-25 11:45 J -20831159.13 -20831159.01 -20831158.84 0.0081 0.0067

Moon -61746-05-25 14:23 J -20831159.03 -20831158.90 -20831158.73 0.0081 0.0066 \*

Venus -61739-01-19 23:59 J -20828727.67 -20828727.50 -20828727.29 0.0077 0.0037

Venus -61739-09-02 08:37 J -20828502.34 -20828502.14 -20828501.92 0.0076 0.0020

Venus -61738-04-15 16:47 J -20828276.83 -20828276.80 -20828276.72 0.0076 0.0074

Mercury -61598-01-28 22:18 J -20777218.61 -20777218.57 -20777218.49 0.0061 0.0057

Mercury -61598-04-26 23:30 J -20777130.59 -20777130.52 -20777130.41 0.0061 0.0052

Mercury -61598-07-24 00:57 J -20777042.56 -20777042.46 -20777042.35 0.0061 0.0047

Mercury -61598-10-20 01:40 J -20776954.53 -20776954.43 -20776954.28 0.0061 0.0043

Mercury -61597-01-16 02:52 J -20776866.50 -20776866.38 -20776866.22 0.0061 0.0038

Mercury -61597-04-13 04:04 J -20776778.46 -20776778.33 -20776778.17 0.0061 0.0034

Mercury -61597-07-10 05:16 J -20776690.42 -20776690.28 -20776690.11 0.0061 0.0029

Mercury -61597-10-06 06:28 J -20776602.38 -20776602.23 -20776602.05 0.0061 0.0024

Mercury -61596-01-02 07:40 J -20776514.34 -20776514.18 -20776514.00 0.0062 0.0019

Mercury -61596-03-31 08:52 J -20776426.29 -20776426.13 -20776425.95 0.0062 0.0014

Mercury -61596-06-27 10:04 J -20776338.25 -20776338.08 -20776337.90 0.0062 0.0009

Mercury -61596-09-23 11:30 J -20776250.20 -20776250.02 -20776249.84 0.0062 0.0004

Mercury -61596-12-20 12:42 J -20776162.15 -20776161.97 -20776161.79 0.0062 0.0001

Mercury -61595-03-18 13:54 J -20776074.10 -20776073.92 -20776073.74 0.0062 0.0006

Mercury -61595-06-14 15:06 J -20775986.05 -20775985.87 -20775985.70 0.0062 0.0011

Mercury -61595-09-10 16:18 J -20775897.99 -20775897.82 -20775897.65 0.0062 0.0016

Mercury -61595-12-07 17:30 J -20775809.94 -20775809.77 -20775809.60 0.0062 0.0022

Mercury -61594-03-05 18:28 J -20775721.88 -20775721.73 -20775721.56 0.0062 0.0027

Mercury -61594-06-01 19:40 J -20775633.82 -20775633.68 -20775633.51 0.0062 0.0032

Mercury -61594-08-28 20:52 J -20775545.76 -20775545.63 -20775545.47 0.0062 0.0038



Mercury -61594-11-24 22:18 J -20775457.69 -20775457.57 -20775457.43 0.0062 0.0043

Mercury -61593-02-20 23:30 J -20775369.62 -20775369.52 -20775369.39 0.0062 0.0048

Mercury -61593-05-19 00:28 J -20775281.55 -20775281.48 -20775281.36 0.0063 0.0054

Mercury -61593-08-15 01:54 J -20775193.46 -20775193.42 -20775193.34 0.0063 0.0059

Moon -61590-11-18 21:35 J -20774002.78 -20774002.60 -20774002.40 0.0064 0.0042

Earth -61590-11-18 23:59 J -20774002.68 -20774002.50 -20774002.28 0.0064 0.0040 \*

Earth -61589-11-19 11:30 J -20773636.18 -20773636.02 -20773635.79 0.0064 0.0042

Moon -61589-11-19 12:28 J -20773636.15 -20773635.98 -20773635.77 0.0064 0.0045 \*

Venus -61579-04-20 03:21 J -20770197.50 -20770197.36 -20770197.18 0.0068 0.0049

Venus -61579-12-01 09:35 J -20769972.31 -20769972.10 -20769971.87 0.0068 0.0009

Venus -61578-07-14 15:49 J -20769747.04 -20769746.84 -20769746.64 0.0068 0.0032

Mercury -61506-06-20 13:54 J -20743472.98 -20743472.92 -20743472.85 0.0084 0.0074

Mercury -61506-09-16 15:35 J -20743384.94 -20743384.85 -20743384.76 0.0084 0.0064

Mercury -61506-12-13 17:01 J -20743296.89 -20743296.79 -20743296.67 0.0084 0.0054

Mercury -61505-03-10 18:42 J -20743208.84 -20743208.72 -20743208.59 0.0083 0.0044

Mercury -61505-06-06 20:23 J -20743120.78 -20743120.65 -20743120.52 0.0083 0.0034

Mercury -61505-09-02 21:49 J -20743032.72 -20743032.59 -20743032.45 0.0083 0.0024

Mercury -61505-11-29 23:30 J -20742944.66 -20742944.52 -20742944.38 0.0083 0.0014

Mercury -61504-02-26 00:57 J -20742856.60 -20742856.46 -20742856.31 0.0083 0.0004

Mercury -61504-05-25 02:23 J -20742768.54 -20742768.40 -20742768.25 0.0083 0.0007

Mercury -61504-08-21 03:49 J -20742680.47 -20742680.34 -20742680.19 0.0083 0.0016

Mercury -61504-11-17 05:30 J -20742592.41 -20742592.27 -20742592.13 0.0082 0.0025

Mercury -61503-02-13 06:57 J -20742504.34 -20742504.21 -20742504.08 0.0082 0.0034

Mercury -61503-05-12 08:23 J -20742416.27 -20742416.15 -20742416.03 0.0082 0.0044

Mercury -61503-08-08 09:35 J -20742328.19 -20742328.10 -20742327.98 0.0082 0.0053

Mercury -61503-11-04 11:16 J -20742240.12 -20742240.03 -20742239.94 0.0082 0.0062

Mercury -61502-01-31 12:42 J -20742152.03 -20742151.97 -20742151.90 0.0082 0.0071

Mercury -61502-04-29 14:09 J -20742063.93 -20742063.91 -20742063.88 0.0082 0.0080

Moon -61500-05-26 05:45 J -20741306.43 -20741306.26 -20741306.05 0.0081 0.0056

Earth -61500-05-26 09:35 J -20741306.28 -20741306.10 -20741305.92 0.0081 0.0058 \*

Venus -61493-02-18 07:40 J -20738847.34 -20738847.18 -20738846.97 0.0077 0.0040

Venus -61493-09-30 16:33 J -20738622.02 -20738621.81 -20738621.60 0.0076 0.0016

Venus -61492-05-14 00:28 J -20738396.55 -20738396.48 -20738396.39 0.0076 0.0070

Mercury -61352-03-22 11:45 J -20687314.04 -20687314.01 -20687313.97 0.0061 0.0059

Mercury -61352-06-18 12:28 J -20687226.04 -20687225.98 -20687225.89 0.0061 0.0055

Mercury -61352-09-14 13:40 J -20687138.01 -20687137.93 -20687137.82 0.0061 0.0050

Mercury -61352-12-11 14:52 J -20687049.98 -20687049.88 -20687049.75 0.0061 0.0046

Mercury -61351-03-09 16:18 J -20686961.95 -20686961.82 -20686961.69 0.0061 0.0041

Mercury -61351-06-05 17:01 J -20686873.92 -20686873.79 -20686873.63 0.0061 0.0036

Mercury -61351-09-01 18:13 J -20686785.88 -20686785.74 -20686785.57 0.0061 0.0032

Mercury -61351-11-28 19:25 J -20686697.84 -20686697.69 -20686697.52 0.0061 0.0027

Mercury -61350-02-24 20:37 J -20686609.80 -20686609.64 -20686609.46 0.0062 0.0022

Mercury -61350-05-23 21:49 J -20686521.75 -20686521.59 -20686521.41 0.0062 0.0017

Mercury -61350-08-19 23:01 J -20686433.71 -20686433.54 -20686433.36 0.0062 0.0012

Mercury -61350-11-16 00:28 J -20686345.66 -20686345.48 -20686345.31 0.0062 0.0007

Mercury -61349-02-12 01:40 J -20686257.61 -20686257.43 -20686257.25 0.0062 0.0002

Mercury -61349-05-10 02:52 J -20686169.56 -20686169.38 -20686169.20 0.0062 0.0003

Mercury -61349-08-06 04:04 J -20686081.51 -20686081.33 -20686081.16 0.0062 0.0008

Mercury -61349-11-02 05:01 J -20685993.46 -20685993.29 -20685993.11 0.0062 0.0013

Mercury -61348-01-29 06:13 J -20685905.40 -20685905.24 -20685905.06 0.0062 0.0019

Mercury -61348-04-27 07:40 J -20685817.35 -20685817.18 -20685817.02 0.0062 0.0023

Mercury -61348-07-24 08:52 J -20685729.29 -20685729.13 -20685728.97 0.0062 0.0029

Mercury -61348-10-20 09:35 J -20685641.23 -20685641.10 -20685640.93 0.0062 0.0035

Mercury -61347-01-16 11:01 J -20685553.17 -20685553.04 -20685552.89 0.0062 0.0039

Mercury -61347-04-14 12:13 J -20685465.10 -20685464.99 -20685464.85 0.0062 0.0045

Mercury -61347-07-11 13:40 J -20685377.03 -20685376.93 -20685376.81 0.0063 0.0050

Mercury -61347-10-07 15:06 J -20685288.95 -20685288.87 -20685288.78 0.0063 0.0055

Mercury -61346-01-03 15:49 J -20685200.86 -20685200.84 -20685200.77 0.0063 0.0061

Earth -61344-11-19 19:11 J -20684149.83 -20684149.70 -20684149.54 0.0064 0.0053

Moon -61344-11-19 22:04 J -20684149.68 -20684149.58 -20684149.43 0.0064 0.0056 \*

Moon -61343-11-21 03:06 J -20683783.56 -20683783.37 -20683783.11 0.0064 0.0032  
 Earth -61343-11-21 07:25 J -20683783.42 -20683783.19 -20683782.95 0.0064 0.0028 \*  
 Venus -61333-05-18 07:25 J -20680317.27 -20680317.19 -20680317.06 0.0068 0.0060  
 Venus -61333-12-29 13:40 J -20680092.14 -20680091.93 -20680091.71 0.0068 0.0020  
 Venus -61332-08-11 19:54 J -20679866.88 -20679866.67 -20679866.45 0.0068 0.0020  
 Venus -61331-03-25 01:40 J -20679641.50 -20679641.43 -20679641.31 0.0068 0.0062  
 Mercury -61260-08-12 03:21 J -20653568.39 -20653568.36 -20653568.31 0.0084 0.0080  
 Mercury -61260-11-08 04:47 J -20653480.36 -20653480.30 -20653480.21 0.0084 0.0070  
 Mercury -61259-02-04 06:28 J -20653392.32 -20653392.23 -20653392.12 0.0084 0.0060  
 Mercury -61259-05-03 08:09 J -20653304.27 -20653304.16 -20653304.04 0.0083 0.0049  
 Mercury -61259-07-30 09:35 J -20653216.21 -20653216.10 -20653215.96 0.0083 0.0040  
 Mercury -61259-10-26 11:16 J -20653128.16 -20653128.03 -20653127.89 0.0083 0.0029  
 Mercury -61258-01-22 12:57 J -20653040.10 -20653039.96 -20653039.82 0.0083 0.0019  
 Mercury -61258-04-20 14:23 J -20652952.04 -20652951.90 -20652951.75 0.0083 0.0010  
 Mercury -61258-07-17 16:04 J -20652863.97 -20652863.83 -20652863.69 0.0083 0.0001  
 Mercury -61258-10-13 17:30 J -20652775.91 -20652775.77 -20652775.63 0.0083 0.0010  
 Mercury -61257-01-09 18:57 J -20652687.84 -20652687.71 -20652687.57 0.0082 0.0019  
 Mercury -61257-04-06 20:23 J -20652599.78 -20652599.65 -20652599.51 0.0082 0.0029  
 Mercury -61257-07-03 21:49 J -20652511.71 -20652511.59 -20652511.46 0.0082 0.0038  
 Mercury -61257-09-29 23:30 J -20652423.64 -20652423.52 -20652423.41 0.0082 0.0047  
 Mercury -61257-12-27 00:42 J -20652335.56 -20652335.47 -20652335.36 0.0082 0.0057  
 Mercury -61256-03-25 02:09 J -20652247.48 -20652247.41 -20652247.32 0.0082 0.0066  
 Mercury -61256-06-21 03:35 J -20652159.40 -20652159.35 -20652159.29 0.0082 0.0075  
 Moon -61254-05-27 22:47 J -20651453.78 -20651453.55 -20651453.30 0.0081 0.0021  
 Earth -61254-05-27 23:01 J -20651453.77 -20651453.54 -20651453.28 0.0081 0.0025 \*  
 Venus -61247-03-18 11:30 J -20648967.14 -20648967.02 -20648966.85 0.0077 0.0057  
 Venus -61247-10-29 20:23 J -20648741.86 -20648741.65 -20648741.43 0.0077 0.0001  
 Venus -61246-06-12 04:18 J -20648516.46 -20648516.32 -20648516.16 0.0076 0.0054  
 Mercury -61106-08-11 00:28 J -20597321.50 -20597321.48 -20597321.46 0.0061 0.0060  
 Mercury -61106-11-07 01:11 J -20597233.50 -20597233.45 -20597233.36 0.0061 0.0056

Mercury -61105-02-03 02:23 J -20597145.48 -20597145.40 -20597145.29 0.0061 0.0051

Mercury -61105-05-01 03:49 J -20597057.45 -20597057.34 -20597057.22 0.0061 0.0046

Mercury -61105-07-28 04:33 J -20596969.42 -20596969.31 -20596969.16 0.0061 0.0042

Mercury -61105-10-24 05:45 J -20596881.38 -20596881.26 -20596881.10 0.0061 0.0037

Mercury -61104-01-20 06:57 J -20596793.35 -20596793.21 -20596793.05 0.0061 0.0033

Mercury -61104-04-18 08:09 J -20596705.31 -20596705.16 -20596704.99 0.0061 0.0028

Mercury -61104-07-15 09:35 J -20596617.26 -20596617.10 -20596616.93 0.0061 0.0023

Mercury -61104-10-11 10:47 J -20596529.22 -20596529.05 -20596528.88 0.0062 0.0018

Mercury -61103-01-07 11:59 J -20596441.18 -20596441.00 -20596440.83 0.0062 0.0013

Mercury -61103-04-05 13:11 J -20596353.13 -20596352.95 -20596352.78 0.0062 0.0008

Mercury -61103-07-02 14:09 J -20596265.08 -20596264.91 -20596264.73 0.0062 0.0004

Mercury -61103-09-28 15:35 J -20596177.03 -20596176.85 -20596176.67 0.0062 0.0002

Mercury -61103-12-25 16:33 J -20596088.98 -20596088.81 -20596088.63 0.0062 0.0007

Mercury -61102-03-23 17:45 J -20596000.93 -20596000.76 -20596000.58 0.0062 0.0012

Mercury -61102-06-19 18:57 J -20595912.87 -20595912.71 -20595912.53 0.0062 0.0017

Mercury -61102-09-15 20:09 J -20595824.82 -20595824.66 -20595824.48 0.0062 0.0022

Mercury -61102-12-12 21:21 J -20595736.76 -20595736.61 -20595736.44 0.0062 0.0027

Mercury -61101-03-09 22:33 J -20595648.70 -20595648.56 -20595648.39 0.0062 0.0033

Mercury -61101-06-05 23:59 J -20595560.64 -20595560.50 -20595560.35 0.0062 0.0038

Mercury -61101-09-02 01:11 J -20595472.57 -20595472.45 -20595472.31 0.0062 0.0043

Mercury -61101-11-29 02:09 J -20595384.50 -20595384.41 -20595384.28 0.0063 0.0049

Mercury -61100-02-25 03:21 J -20595296.43 -20595296.36 -20595296.24 0.0063 0.0054

Mercury -61100-05-24 04:47 J -20595208.34 -20595208.30 -20595208.22 0.0063 0.0059

Earth -61097-11-21 22:04 J -20593930.84 -20593930.58 -20593930.32 0.0064 0.0002

Moon -61097-11-21 23:30 J -20593930.77 -20593930.52 -20593930.27 0.0064 0.0005 \*

Mars -61094-06-14 16:18 J -20592995.97 -20592995.82 -20592995.62 0.0065 0.0055

Venus -61086-01-27 14:37 J -20590212.05 -20590211.89 -20590211.70 0.0068 0.0041

Venus -61086-09-09 21:06 J -20589986.85 -20589986.62 -20589986.40 0.0068 0.0001

Venus -61085-04-22 02:37 J -20589761.55 -20589761.39 -20589761.18 0.0068 0.0041

Mercury -61014-12-31 17:30 J -20563575.81 -20563575.77 -20563575.73 0.0084 0.0080

Mercury -61013-03-28 18:57 J -20563487.78 -20563487.71 -20563487.63 0.0084 0.0070

Mercury -61013-06-24 20:37 J -20563399.74 -20563399.64 -20563399.54 0.0084 0.0060

Mercury -61013-09-20 22:04 J -20563311.69 -20563311.58 -20563311.46 0.0083 0.0050

Mercury -61013-12-17 23:45 J -20563223.63 -20563223.51 -20563223.38 0.0083 0.0040

Mercury -61012-03-16 01:25 J -20563135.57 -20563135.44 -20563135.31 0.0083 0.0030

Mercury -61012-06-12 02:52 J -20563047.52 -20563047.38 -20563047.24 0.0083 0.0020

Mercury -61012-09-08 04:33 J -20562959.45 -20562959.31 -20562959.17 0.0083 0.0010

Mercury -61012-12-05 05:59 J -20562871.39 -20562871.25 -20562871.11 0.0083 0.0001

Mercury -61011-03-03 07:25 J -20562783.33 -20562783.19 -20562783.04 0.0083 0.0010

Mercury -61011-05-30 09:06 J -20562695.26 -20562695.12 -20562694.99 0.0082 0.0019

Mercury -61011-08-26 10:18 J -20562607.20 -20562607.07 -20562606.93 0.0082 0.0029

Mercury -61011-11-22 11:59 J -20562519.13 -20562519.00 -20562518.87 0.0082 0.0038

Mercury -61010-02-18 13:11 J -20562431.05 -20562430.95 -20562430.82 0.0082 0.0047

Mercury -61010-05-17 14:37 J -20562342.98 -20562342.89 -20562342.78 0.0082 0.0056

Mercury -61010-08-13 16:18 J -20562254.90 -20562254.82 -20562254.74 0.0082 0.0065

Mercury -61010-11-09 17:45 J -20562166.82 -20562166.76 -20562166.70 0.0082 0.0074

Earth -61008-05-28 07:54 J -20561601.41 -20561601.17 -20561600.93 0.0081 0.0028

Moon -61008-05-28 11:01 J -20561601.26 -20561601.04 -20561600.78 0.0081 0.0033 \*

Venus -61001-11-26 21:06 J -20558861.81 -20558861.62 -20558861.41 0.0077 0.0027

# 61ST MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 61st millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Venus	-61000-07-10 05:30 J	-20558636.47	-20558636.27	-20558636.06	0.0076	0.0029
Mercury	-60859-03-27 13:11 J	-20507240.98	-20507240.95	-20507240.89	0.0061	0.0059
Mercury	-60859-06-23 14:23 J	-20507152.96	-20507152.90	-20507152.81	0.0061	0.0054
Mercury	-60859-09-19 15:49 J	-20507064.94	-20507064.84	-20507064.74	0.0061	0.0050
Mercury	-60859-12-16 16:33 J	-20506976.91	-20506976.81	-20506976.68	0.0061	0.0045
Mercury	-60858-03-14 17:45 J	-20506888.88	-20506888.76	-20506888.61	0.0061	0.0040
Mercury	-60858-06-10 18:57 J	-20506800.84	-20506800.71	-20506800.56	0.0061	0.0036
Mercury	-60858-09-06 20:23 J	-20506712.80	-20506712.65	-20506712.50	0.0061	0.0031
Mercury	-60858-12-03 21:06 J	-20506624.76	-20506624.62	-20506624.44	0.0061	0.0027
Mercury	-60857-02-29 22:18 J	-20506536.72	-20506536.57	-20506536.39	0.0061	0.0022
Mercury	-60857-05-27 23:30 J	-20506448.68	-20506448.52	-20506448.34	0.0062	0.0017
Mercury	-60857-08-24 00:57 J	-20506360.63	-20506360.46	-20506360.28	0.0062	0.0012
Mercury	-60857-11-20 02:09 J	-20506272.58	-20506272.41	-20506272.23	0.0062	0.0007
Mercury	-60856-02-16 03:21 J	-20506184.54	-20506184.36	-20506184.18	0.0062	0.0002
Mercury	-60856-05-15 04:33 J	-20506096.49	-20506096.31	-20506096.13	0.0062	0.0003
Mercury	-60856-08-11 05:45 J	-20506008.44	-20506008.26	-20506008.08	0.0062	0.0008
Mercury	-60856-11-07 06:57 J	-20505920.38	-20505920.21	-20505920.03	0.0062	0.0013
Mercury	-60855-02-03 08:09 J	-20505832.33	-20505832.16	-20505831.99	0.0062	0.0018
Mercury	-60855-05-02 09:21 J	-20505744.27	-20505744.11	-20505743.94	0.0062	0.0023
Mercury	-60855-07-29 10:33 J	-20505656.21	-20505656.06	-20505655.90	0.0062	0.0029
Mercury	-60855-10-25 11:59 J	-20505568.15	-20505568.00	-20505567.85	0.0062	0.0034
Mercury	-60854-01-21 12:42 J	-20505480.09	-20505479.97	-20505479.81	0.0062	0.0039
Mercury	-60854-04-19 13:54 J	-20505392.02	-20505391.92	-20505391.77	0.0062	0.0045
Mercury	-60854-07-16 15:21 J	-20505303.95	-20505303.86	-20505303.74	0.0063	0.0050
Mercury	-60854-10-12 16:33 J	-20505215.88	-20505215.81	-20505215.71	0.0063	0.0055
Mercury	-60853-01-08 17:59 J	-20505127.79	-20505127.75	-20505127.69	0.0063	0.0060
Earth	-60851-11-23 09:06 J	-20504078.32	-20504078.12	-20504077.87	0.0064	0.0034
Moon	-60851-11-23 11:59 J	-20504078.22	-20504078.00	-20504077.75	0.0064	0.0031 *
Moon	-60850-11-24 20:09 J	-20503711.81	-20503711.66	-20503711.46	0.0064	0.0046

Earth	-60850-11-24 20:37 J	-20503711.78	-20503711.64	-20503711.43	0.0064	0.0048	*
Mars	-60848-11-03 16:04 J	-20503001.98	-20503001.83	-20503001.63	0.0065	0.0055	
Venus	-60840-10-07 18:42 J	-20500106.90	-20500106.72	-20500106.49	0.0068	0.0030	
Venus	-60839-05-21 00:57 J	-20499881.67	-20499881.46	-20499881.22	0.0068	0.0012	
Venus	-60838-01-01 06:42 J	-20499656.34	-20499656.22	-20499656.05	0.0068	0.0053	
Mercury	-60767-08-17 06:57 J	-20473495.25	-20473495.21	-20473495.16	0.0084	0.0078	
Mercury	-60767-11-13 08:37 J	-20473407.22	-20473407.14	-20473407.06	0.0084	0.0068	
Mercury	-60766-02-09 10:04 J	-20473319.17	-20473319.08	-20473318.97	0.0083	0.0058	
Mercury	-60766-05-08 11:45 J	-20473231.12	-20473231.01	-20473230.89	0.0083	0.0048	
Mercury	-60766-08-04 13:25 J	-20473143.07	-20473142.94	-20473142.81	0.0083	0.0038	
Mercury	-60766-10-31 14:52 J	-20473055.01	-20473054.88	-20473054.74	0.0083	0.0028	
Mercury	-60765-01-27 16:33 J	-20472966.95	-20472966.81	-20472966.67	0.0083	0.0018	
Mercury	-60765-04-24 17:59 J	-20472878.89	-20472878.75	-20472878.60	0.0083	0.0009	
Mercury	-60765-07-21 19:40 J	-20472790.82	-20472790.68	-20472790.54	0.0083	0.0001	
Mercury	-60765-10-17 21:06 J	-20472702.76	-20472702.62	-20472702.48	0.0083	0.0011	
Mercury	-60764-01-13 22:33 J	-20472614.69	-20472614.56	-20472614.42	0.0082	0.0021	
Mercury	-60764-04-11 23:59 J	-20472526.63	-20472526.50	-20472526.36	0.0082	0.0030	
Mercury	-60764-07-09 01:25 J	-20472438.56	-20472438.44	-20472438.31	0.0082	0.0039	
Mercury	-60764-10-05 03:06 J	-20472350.48	-20472350.37	-20472350.26	0.0082	0.0048	
Mercury	-60763-01-01 04:18 J	-20472262.41	-20472262.32	-20472262.21	0.0082	0.0058	
Mercury	-60763-03-30 05:45 J	-20472174.33	-20472174.26	-20472174.17	0.0082	0.0067	
Mercury	-60763-06-26 07:11 J	-20472086.24	-20472086.20	-20472086.14	0.0082	0.0076	
Earth	-60761-05-30 12:42 J	-20471382.16	-20471381.97	-20471381.77	0.0081	0.0052	
Moon	-60761-05-30 15:35 J	-20471382.01	-20471381.85	-20471381.64	0.0081	0.0056	*
Venus	-60755-12-25 17:01 J	-20468981.87	-20468981.79	-20468981.71	0.0077	0.0071	
Venus	-60754-08-08 01:25 J	-20468756.65	-20468756.44	-20468756.22	0.0077	0.0015	
Venus	-60753-03-20 09:49 J	-20468531.27	-20468531.09	-20468530.90	0.0076	0.0040	
Mercury	-60613-11-11 01:25 J	-20417160.45	-20417160.44	-20417160.41	0.0061	0.0060	
Mercury	-60612-02-07 02:09 J	-20417072.45	-20417072.41	-20417072.32	0.0061	0.0056	
Mercury	-60612-05-06 03:35 J	-20416984.43	-20416984.35	-20416984.24	0.0061	0.0051	

Mercury -60612-08-02 04:47 J -20416896.41 -20416896.30 -20416896.18 0.0061 0.0047

Mercury -60612-10-29 05:30 J -20416808.37 -20416808.27 -20416808.12 0.0061 0.0043

Mercury -60611-01-25 06:42 J -20416720.34 -20416720.22 -20416720.06 0.0061 0.0038

Mercury -60611-04-23 08:09 J -20416632.30 -20416632.16 -20416632.00 0.0061 0.0032

Mercury -60611-07-20 09:21 J -20416544.26 -20416544.11 -20416543.95 0.0061 0.0028

Mercury -60611-10-16 10:33 J -20416456.22 -20416456.06 -20416455.89 0.0061 0.0023

Mercury -60610-01-12 11:45 J -20416368.18 -20416368.01 -20416367.84 0.0062 0.0018

Mercury -60610-04-10 12:42 J -20416280.14 -20416279.97 -20416279.79 0.0062 0.0013

Mercury -60610-07-07 13:54 J -20416192.09 -20416191.92 -20416191.74 0.0062 0.0009

Mercury -60610-10-03 15:06 J -20416104.04 -20416103.87 -20416103.69 0.0062 0.0004

Mercury -60610-12-30 16:33 J -20416015.99 -20416015.81 -20416015.64 0.0062 0.0002

Mercury -60609-03-27 17:30 J -20415927.94 -20415927.77 -20415927.59 0.0062 0.0007

Mercury -60609-06-23 18:42 J -20415839.89 -20415839.72 -20415839.54 0.0062 0.0012

Mercury -60609-09-19 19:40 J -20415751.84 -20415751.68 -20415751.49 0.0062 0.0018

Mercury -60609-12-16 20:52 J -20415663.78 -20415663.63 -20415663.45 0.0062 0.0022

Mercury -60608-03-14 22:04 J -20415575.72 -20415575.58 -20415575.40 0.0062 0.0028

Mercury -60608-06-10 23:16 J -20415487.66 -20415487.53 -20415487.36 0.0062 0.0033

Mercury -60608-09-07 00:42 J -20415399.60 -20415399.47 -20415399.32 0.0062 0.0037

Mercury -60608-12-04 01:54 J -20415311.54 -20415311.42 -20415311.28 0.0062 0.0043

Mercury -60607-03-02 03:06 J -20415223.47 -20415223.37 -20415223.24 0.0063 0.0048

Mercury -60607-05-29 04:33 J -20415135.39 -20415135.31 -20415135.21 0.0063 0.0053

Mercury -60607-08-25 05:30 J -20415047.31 -20415047.27 -20415047.18 0.0063 0.0059

Earth -60604-11-25 04:33 J -20413859.57 -20413859.31 -20413859.05 0.0064 0.0001

Moon -60604-11-25 08:09 J -20413859.42 -20413859.16 -20413858.90 0.0064 0.0001 \*

Venus -60594-11-05 14:09 J -20410226.92 -20410226.91 -20410226.86 0.0068 0.0067

Venus -60593-06-17 20:09 J -20410001.85 -20410001.66 -20410001.44 0.0068 0.0027

Venus -60592-01-29 02:09 J -20409776.61 -20409776.41 -20409776.17 0.0068 0.0015

Venus -60592-09-11 08:52 J -20409551.26 -20409551.13 -20409551.00 0.0068 0.0055

Mercury -60520-04-02 19:25 J -20383414.71 -20383414.69 -20383414.64 0.0084 0.0081

Mercury -60520-06-29 21:06 J -20383326.69 -20383326.62 -20383326.53 0.0084 0.0070



Mercury -60520-09-25 22:33 J -20383238.64 -20383238.56 -20383238.44 0.0083 0.0061

Mercury -60520-12-23 00:13 J -20383150.59 -20383150.49 -20383150.36 0.0083 0.0051

Mercury -60519-03-21 01:54 J -20383062.54 -20383062.42 -20383062.29 0.0083 0.0040

Mercury -60519-06-17 03:35 J -20382974.48 -20382974.35 -20382974.21 0.0083 0.0030

Mercury -60519-09-13 05:16 J -20382886.42 -20382886.28 -20382886.14 0.0083 0.0020

Mercury -60519-12-10 06:42 J -20382798.36 -20382798.22 -20382798.07 0.0083 0.0011

Mercury -60518-03-08 08:23 J -20382710.29 -20382710.15 -20382710.01 0.0083 0.0001

Mercury -60518-06-04 09:49 J -20382622.23 -20382622.09 -20382621.95 0.0083 0.0009

Mercury -60518-08-31 11:16 J -20382534.16 -20382534.03 -20382533.89 0.0082 0.0018

Mercury -60518-11-27 12:42 J -20382446.10 -20382445.97 -20382445.83 0.0082 0.0028

Mercury -60517-02-23 14:23 J -20382358.03 -20382357.90 -20382357.77 0.0082 0.0037

Mercury -60517-05-21 15:35 J -20382269.96 -20382269.85 -20382269.72 0.0082 0.0046

Mercury -60517-08-17 17:01 J -20382181.88 -20382181.79 -20382181.67 0.0082 0.0055

Mercury -60517-11-13 18:42 J -20382093.80 -20382093.72 -20382093.63 0.0082 0.0064

Mercury -60516-02-09 20:09 J -20382005.72 -20382005.66 -20382005.60 0.0082 0.0073

Moon -60515-05-31 07:54 J -20381530.38 -20381530.17 -20381529.95 0.0081 0.0047

Earth -60515-05-31 07:54 J -20381530.36 -20381530.17 -20381529.95 0.0081 0.0048 \*

Venus -60508-09-04 18:28 J -20378876.81 -20378876.73 -20378876.61 0.0077 0.0068

Venus -60507-04-18 03:21 J -20378651.57 -20378651.36 -20378651.14 0.0077 0.0012

Venus -60507-11-29 11:30 J -20378426.18 -20378426.02 -20378425.83 0.0076 0.0044

Mercury -60366-09-24 13:54 J -20326991.95 -20326991.92 -20326991.85 0.0061 0.0058

Mercury -60366-12-21 15:21 J -20326903.93 -20326903.86 -20326903.77 0.0061 0.0053

Mercury -60365-03-18 16:04 J -20326815.91 -20326815.83 -20326815.70 0.0061 0.0049

Mercury -60365-06-14 17:16 J -20326727.88 -20326727.78 -20326727.64 0.0061 0.0045

Mercury -60365-09-10 18:42 J -20326639.85 -20326639.72 -20326639.58 0.0061 0.0040

Mercury -60365-12-07 19:54 J -20326551.81 -20326551.67 -20326551.52 0.0061 0.0035

Mercury -60364-03-05 20:37 J -20326463.77 -20326463.64 -20326463.47 0.0061 0.0031

Mercury -60364-06-01 22:04 J -20326375.73 -20326375.58 -20326375.41 0.0061 0.0025

Mercury -60364-08-28 23:16 J -20326287.69 -20326287.53 -20326287.36 0.0062 0.0021

Mercury -60364-11-25 00:28 J -20326199.65 -20326199.48 -20326199.30 0.0062 0.0016

Mercury -60363-02-21 01:40 J -20326111.60 -20326111.43 -20326111.25 0.0062 0.0011

Mercury -60363-05-20 02:52 J -20326023.56 -20326023.38 -20326023.20 0.0062 0.0006

Mercury -60363-08-16 04:04 J -20325935.51 -20325935.33 -20325935.15 0.0062 0.0001

Mercury -60363-11-12 05:16 J -20325847.46 -20325847.28 -20325847.10 0.0062 0.0004

Mercury -60362-02-08 06:13 J -20325759.41 -20325759.24 -20325759.06 0.0062 0.0009

Mercury -60362-05-07 07:25 J -20325671.36 -20325671.19 -20325671.01 0.0062 0.0014

Mercury -60362-08-03 08:37 J -20325583.30 -20325583.14 -20325582.96 0.0062 0.0019

Mercury -60362-10-30 09:49 J -20325495.25 -20325495.09 -20325494.92 0.0062 0.0024

Mercury -60361-01-26 11:01 J -20325407.19 -20325407.04 -20325406.87 0.0062 0.0029

Mercury -60361-04-23 12:13 J -20325319.13 -20325318.99 -20325318.83 0.0062 0.0035

Mercury -60361-07-20 13:25 J -20325231.06 -20325230.94 -20325230.79 0.0062 0.0040

Mercury -60361-10-16 14:52 J -20325143.00 -20325142.88 -20325142.75 0.0062 0.0045

Mercury -60360-01-12 16:18 J -20325054.93 -20325054.82 -20325054.72 0.0063 0.0050

Mercury -60360-04-10 17:01 J -20324966.85 -20324966.79 -20324966.69 0.0063 0.0056

Mercury -60360-07-07 18:13 J -20324878.76 -20324878.74 -20324878.67 0.0063 0.0061

Moon -60358-11-26 08:23 J -20324007.30 -20324007.15 -20324006.95 0.0063 0.0048

Earth -60358-11-26 10:47 J -20324007.21 -20324007.05 -20324006.88 0.0063 0.0049 \*

Earth -60357-11-26 22:04 J -20323640.79 -20323640.58 -20323640.34 0.0064 0.0031

Moon -60357-11-27 01:25 J -20323640.65 -20323640.44 -20323640.20 0.0064 0.0029 \*

Venus -60347-07-16 14:23 J -20320121.91 -20320121.90 -20320121.84 0.0068 0.0067

Venus -60346-02-26 20:37 J -20319896.83 -20319896.64 -20319896.42 0.0068 0.0027

Venus -60346-10-10 02:52 J -20319671.59 -20319671.38 -20319671.15 0.0068 0.0014

Venus -60345-05-22 08:52 J -20319446.24 -20319446.13 -20319445.98 0.0068 0.0056

Mercury -60273-02-14 09:06 J -20293246.17 -20293246.12 -20293246.06 0.0084 0.0077

Mercury -60273-05-12 10:33 J -20293158.13 -20293158.06 -20293157.96 0.0083 0.0067

Mercury -60273-08-08 12:13 J -20293070.08 -20293069.99 -20293069.87 0.0083 0.0057

Mercury -60273-11-04 13:54 J -20292982.03 -20292981.92 -20292981.79 0.0083 0.0046

Mercury -60272-01-31 15:35 J -20292893.97 -20292893.85 -20292893.72 0.0083 0.0036

Mercury -60272-04-29 17:16 J -20292805.92 -20292805.78 -20292805.64 0.0083 0.0026

Mercury -60272-07-26 18:42 J -20292717.86 -20292717.72 -20292717.58 0.0083 0.0017

Mercury -60272-10-22 20:23 J -20292629.79 -20292629.65 -20292629.51 0.0083 0.0007

Mercury -60271-01-18 21:49 J -20292541.73 -20292541.59 -20292541.45 0.0083 0.0003

Mercury -60271-04-16 23:16 J -20292453.67 -20292453.53 -20292453.38 0.0082 0.0012

Mercury -60271-07-14 00:57 J -20292365.60 -20292365.46 -20292365.33 0.0082 0.0022

Mercury -60271-10-10 02:09 J -20292277.53 -20292277.41 -20292277.27 0.0082 0.0031

Mercury -60270-01-06 03:35 J -20292189.46 -20292189.35 -20292189.22 0.0082 0.0041

Mercury -60270-04-04 05:16 J -20292101.39 -20292101.28 -20292101.17 0.0082 0.0049

Mercury -60270-07-01 06:28 J -20292013.32 -20292013.23 -20292013.12 0.0082 0.0059

Mercury -60270-09-27 07:54 J -20291925.24 -20291925.17 -20291925.08 0.0082 0.0068

Mercury -60270-12-24 09:21 J -20291837.15 -20291837.11 -20291837.05 0.0082 0.0076

Earth -60268-06-02 04:33 J -20291311.57 -20291311.31 -20291311.05 0.0081 0.0002

Moon -60268-06-02 06:28 J -20291311.49 -20291311.23 -20291310.96 0.0081 0.0004 \*

Venus -60261-05-15 17:59 J -20288771.79 -20288771.75 -20288771.65 0.0077 0.0073

Venus -60261-12-27 03:06 J -20288546.58 -20288546.37 -20288546.16 0.0077 0.0016

Venus -60260-08-09 11:01 J -20288321.21 -20288321.04 -20288320.84 0.0076 0.0040

Mercury -60119-08-07 01:54 J -20236823.45 -20236823.42 -20236823.35 0.0061 0.0058

Mercury -60119-11-03 02:52 J -20236735.44 -20236735.38 -20236735.28 0.0061 0.0054

Mercury -60118-01-30 04:04 J -20236647.41 -20236647.33 -20236647.21 0.0061 0.0049

Mercury -60118-04-28 05:30 J -20236559.38 -20236559.27 -20236559.15 0.0061 0.0044

Mercury -60118-07-25 06:13 J -20236471.35 -20236471.24 -20236471.09 0.0061 0.0040

Mercury -60118-10-21 07:25 J -20236383.32 -20236383.19 -20236383.03 0.0061 0.0036

Mercury -60117-01-17 08:37 J -20236295.28 -20236295.14 -20236294.97 0.0061 0.0031

Mercury -60117-04-14 10:04 J -20236207.24 -20236207.08 -20236206.92 0.0061 0.0026

Mercury -60117-07-11 11:16 J -20236119.20 -20236119.03 -20236118.86 0.0062 0.0021

Mercury -60117-10-07 12:13 J -20236031.15 -20236030.99 -20236030.81 0.0062 0.0016

Mercury -60116-01-03 13:25 J -20235943.11 -20235942.94 -20235942.76 0.0062 0.0012

Mercury -60116-04-01 14:37 J -20235855.06 -20235854.89 -20235854.71 0.0062 0.0007

Mercury -60116-06-28 16:04 J -20235767.01 -20235766.83 -20235766.66 0.0062 0.0002

Mercury -60116-09-24 17:01 J -20235678.96 -20235678.79 -20235678.61 0.0062 0.0004

Mercury -60116-12-21 18:13 J -20235590.91 -20235590.74 -20235590.56 0.0062 0.0009

Mercury -60115-03-19 19:25 J -20235502.86 -20235502.69 -20235502.51 0.0062 0.0013

Mercury -60115-06-15 20:37 J -20235414.81 -20235414.64 -20235414.47 0.0062 0.0018

Mercury -60115-09-11 21:49 J -20235326.75 -20235326.59 -20235326.42 0.0062 0.0024

Mercury -60115-12-08 23:01 J -20235238.69 -20235238.54 -20235238.38 0.0062 0.0029

Mercury -60114-03-07 00:13 J -20235150.63 -20235150.49 -20235150.33 0.0062 0.0034

Mercury -60114-06-03 01:40 J -20235062.57 -20235062.43 -20235062.29 0.0062 0.0039

Mercury -60114-08-30 02:23 J -20234974.50 -20234974.40 -20234974.25 0.0063 0.0045

Mercury -60114-11-26 03:35 J -20234886.44 -20234886.35 -20234886.22 0.0063 0.0050

Mercury -60113-02-22 05:01 J -20234798.36 -20234798.29 -20234798.19 0.0063 0.0055

Mercury -60113-05-20 06:28 J -20234710.27 -20234710.23 -20234710.17 0.0063 0.0060

Earth -60111-11-28 00:28 J -20233788.69 -20233788.48 -20233788.23 0.0064 0.0030

Moon -60111-11-28 00:28 J -20233788.68 -20233788.48 -20233788.22 0.0064 0.0033 \*

Earth -60110-11-29 11:59 J -20233422.13 -20233422.00 -20233421.81 0.0064 0.0051

Moon -60110-11-29 14:23 J -20233422.01 -20233421.90 -20233421.75 0.0064 0.0054 \*

Venus -60100-11-06 18:42 J -20229791.90 -20229791.72 -20229791.51 0.0068 0.0034

Venus -60099-06-20 00:42 J -20229566.68 -20229566.47 -20229566.23 0.0068 0.0007

Venus -60098-01-31 06:28 J -20229341.36 -20229341.23 -20229341.05 0.0068 0.0048

Mercury -60027-12-27 22:04 J -20203077.63 -20203077.58 -20203077.51 0.0084 0.0075

Mercury -60026-03-25 23:45 J -20202989.59 -20202989.51 -20202989.41 0.0083 0.0065

Mercury -60026-06-22 01:25 J -20202901.54 -20202901.44 -20202901.33 0.0083 0.0054

Mercury -60026-09-18 03:06 J -20202813.49 -20202813.37 -20202813.25 0.0083 0.0044

Mercury -60026-12-15 04:33 J -20202725.44 -20202725.31 -20202725.17 0.0083 0.0035

Mercury -60025-03-12 05:59 J -20202637.38 -20202637.25 -20202637.10 0.0083 0.0025

Mercury -60025-06-08 07:40 J -20202549.32 -20202549.18 -20202549.03 0.0083 0.0015

Mercury -60025-09-04 09:21 J -20202461.25 -20202461.11 -20202460.97 0.0083 0.0005

Mercury -60025-12-01 10:47 J -20202373.19 -20202373.05 -20202372.90 0.0083 0.0004

Mercury -60024-02-27 12:13 J -20202285.13 -20202284.99 -20202284.84 0.0082 0.0014

Mercury -60024-05-26 13:40 J -20202197.06 -20202196.93 -20202196.79 0.0082 0.0023

Mercury -60024-08-22 15:21 J -20202108.99 -20202108.86 -20202108.73 0.0082 0.0032

Mercury -60024-11-18 16:47 J -20202020.92 -20202020.80 -20202020.68 0.0082 0.0041

Mercury -60023-02-14 17:59 J -20201932.85 -20201932.75 -20201932.63 0.0082 0.0051

Mercury -60023-05-13 19:25 J -20201844.77 -20201844.69 -20201844.58 0.0082 0.0060

Mercury -60023-08-09 20:52 J -20201756.69 -20201756.63 -20201756.54 0.0082 0.0069

Mercury -60023-11-05 22:18 J -20201668.60 -20201668.57 -20201668.52 0.0081 0.0078

Earth -60021-06-03 22:18 J -20201092.79 -20201092.57 -20201092.35 0.0081 0.0042

Moon -60021-06-04 01:11 J -20201092.66 -20201092.45 -20201092.20 0.0081 0.0039 \*

Venus -60014-09-07 01:40 J -20198441.63 -20198441.43 -20198441.22 0.0077 0.0025

Venus -60013-04-19 09:49 J -20198216.27 -20198216.09 -20198215.87 0.0076 0.0032

# 60TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 60th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-59872-06-19 13:25 J	-20146654.97	-20146654.94	-20146654.89	0.0061	0.0059		
Mercury	-59872-09-15 14:09 J	-20146566.96	-20146566.91	-20146566.81	0.0061	0.0056		
Mercury	-59872-12-12 15:35 J	-20146478.93	-20146478.85	-20146478.74	0.0061	0.0050		
Mercury	-59871-03-10 16:47 J	-20146390.91	-20146390.80	-20146390.67	0.0061	0.0046		
Mercury	-59871-06-06 17:45 J	-20146302.87	-20146302.76	-20146302.61	0.0061	0.0041		
Mercury	-59871-09-02 18:57 J	-20146214.84	-20146214.71	-20146214.56	0.0061	0.0037		
Mercury	-59871-11-29 20:09 J	-20146126.80	-20146126.66	-20146126.50	0.0061	0.0032		
Mercury	-59870-02-25 21:35 J	-20146038.76	-20146038.60	-20146038.44	0.0061	0.0027		
Mercury	-59870-05-24 22:18 J	-20145950.72	-20145950.57	-20145950.39	0.0062	0.0023		
Mercury	-59870-08-20 23:30 J	-20145862.68	-20145862.52	-20145862.34	0.0062	0.0018		

Mercury -59870-11-17 00:42 J -20145774.63 -20145774.47 -20145774.29 0.0062 0.0013

Mercury -59869-02-13 02:09 J -20145686.59 -20145686.41 -20145686.23 0.0062 0.0008

Mercury -59869-05-11 03:21 J -20145598.54 -20145598.36 -20145598.18 0.0062 0.0003

Mercury -59869-08-07 04:33 J -20145510.49 -20145510.31 -20145510.13 0.0062 0.0002

Mercury -59869-11-03 05:45 J -20145422.44 -20145422.26 -20145422.09 0.0062 0.0007

Mercury -59868-01-30 06:42 J -20145334.39 -20145334.22 -20145334.04 0.0062 0.0012

Mercury -59868-04-28 07:54 J -20145246.33 -20145246.17 -20145245.99 0.0062 0.0017

Mercury -59868-07-25 09:06 J -20145158.28 -20145158.12 -20145157.95 0.0062 0.0022

Mercury -59868-10-21 10:18 J -20145070.22 -20145070.07 -20145069.90 0.0062 0.0027

Mercury -59867-01-17 11:30 J -20144982.16 -20144982.02 -20144981.86 0.0062 0.0032

Mercury -59867-04-15 12:42 J -20144894.10 -20144893.97 -20144893.82 0.0062 0.0038

Mercury -59867-07-12 13:54 J -20144806.04 -20144805.92 -20144805.78 0.0062 0.0043

Mercury -59867-10-08 15:21 J -20144717.97 -20144717.86 -20144717.74 0.0063 0.0048

Mercury -59866-01-04 16:33 J -20144629.89 -20144629.81 -20144629.71 0.0063 0.0053

Mercury -59866-04-02 17:30 J -20144541.81 -20144541.77 -20144541.69 0.0063 0.0059

Earth -59864-11-29 13:25 J -20143570.18 -20143569.94 -20143569.68 0.0064 0.0014

Moon -59864-11-29 15:35 J -20143570.11 -20143569.85 -20143569.59 0.0064 0.0011 \*

Venus -59853-07-17 15:49 J -20139686.99 -20139686.84 -20139686.66 0.0068 0.0045

Venus -59852-02-27 22:04 J -20139461.81 -20139461.58 -20139461.36 0.0068 0.0004

Venus -59852-10-11 03:35 J -20139236.51 -20139236.35 -20139236.14 0.0068 0.0038

Mercury -59780-11-09 10:18 J -20112909.12 -20112909.07 -20112909.01 0.0083 0.0077

Mercury -59779-02-05 11:59 J -20112821.08 -20112821.00 -20112820.91 0.0083 0.0067

Mercury -59779-05-04 13:40 J -20112733.03 -20112732.93 -20112732.82 0.0083 0.0057

Mercury -59779-07-31 15:06 J -20112644.98 -20112644.87 -20112644.74 0.0083 0.0047

Mercury -59779-10-27 16:47 J -20112556.92 -20112556.80 -20112556.67 0.0083 0.0037

Mercury -59778-01-23 18:28 J -20112468.87 -20112468.73 -20112468.60 0.0083 0.0027

Mercury -59778-04-21 19:54 J -20112380.81 -20112380.67 -20112380.53 0.0083 0.0018

Mercury -59778-07-18 21:35 J -20112292.75 -20112292.60 -20112292.46 0.0083 0.0008

Mercury -59778-10-14 23:01 J -20112204.68 -20112204.54 -20112204.40 0.0082 0.0002

Mercury -59777-01-11 00:28 J -20112116.62 -20112116.48 -20112116.33 0.0082 0.0011

Mercury -59777-04-08 01:54 J -20112028.55 -20112028.42 -20112028.28 0.0082 0.0021  
 Mercury -59777-07-05 03:21 J -20111940.48 -20111940.36 -20111940.22 0.0082 0.0030  
 Mercury -59777-10-01 04:47 J -20111852.42 -20111852.30 -20111852.17 0.0082 0.0039  
 Mercury -59777-12-28 06:28 J -20111764.34 -20111764.23 -20111764.12 0.0082 0.0048  
 Mercury -59776-03-26 07:54 J -20111676.27 -20111676.17 -20111676.07 0.0082 0.0057  
 Mercury -59776-06-22 09:21 J -20111588.19 -20111588.11 -20111588.03 0.0082 0.0066  
 Mercury -59776-09-18 10:47 J -20111500.10 -20111500.05 -20111500.00 0.0081 0.0075  
 Earth -59774-06-06 11:59 J -20110874.14 -20110874.00 -20110873.85 0.0080 0.0066  
 Moon -59774-06-06 15:06 J -20110873.98 -20110873.87 -20110873.73 0.0080 0.0070 \*  
 Mars -59773-11-16 05:01 J -20110345.52 -20110345.29 -20110345.00 0.0080 0.0041  
 Venus -59767-05-17 21:21 J -20108336.77 -20108336.61 -20108336.41 0.0077 0.0044  
 Venus -59767-12-29 05:59 J -20108111.46 -20108111.25 -20108111.03 0.0076 0.0014  
 Venus -59766-08-11 13:40 J -20107885.99 -20107885.93 -20107885.81 0.0076 0.0069  
 Mercury -59625-07-29 00:28 J -20056398.50 -20056398.48 -20056398.42 0.0061 0.0059  
 Mercury -59625-10-25 01:54 J -20056310.49 -20056310.42 -20056310.34 0.0061 0.0054  
 Mercury -59624-01-21 02:37 J -20056222.47 -20056222.39 -20056222.27 0.0061 0.0051  
 Mercury -59624-04-19 04:04 J -20056134.44 -20056134.33 -20056134.20 0.0061 0.0045  
 Mercury -59624-07-16 05:16 J -20056046.40 -20056046.28 -20056046.14 0.0061 0.0041  
 Mercury -59624-10-12 06:13 J -20055958.37 -20055958.24 -20055958.09 0.0061 0.0036  
 Mercury -59623-01-08 07:25 J -20055870.33 -20055870.19 -20055870.03 0.0061 0.0032  
 Mercury -59623-04-06 08:37 J -20055782.29 -20055782.14 -20055781.97 0.0061 0.0027  
 Mercury -59623-07-03 09:49 J -20055694.25 -20055694.09 -20055693.92 0.0062 0.0022  
 Mercury -59623-09-29 10:47 J -20055606.21 -20055606.05 -20055605.87 0.0062 0.0018  
 Mercury -59623-12-26 11:59 J -20055518.16 -20055518.00 -20055517.81 0.0062 0.0013  
 Mercury -59622-03-24 13:25 J -20055430.11 -20055429.94 -20055429.76 0.0062 0.0008  
 Mercury -59622-06-20 14:37 J -20055342.07 -20055341.89 -20055341.71 0.0062 0.0003  
 Mercury -59622-09-16 15:49 J -20055254.02 -20055253.84 -20055253.66 0.0062 0.0002  
 Mercury -59622-12-13 17:01 J -20055165.97 -20055165.79 -20055165.61 0.0062 0.0007  
 Mercury -59621-03-10 18:13 J -20055077.91 -20055077.74 -20055077.57 0.0062 0.0012  
 Mercury -59621-06-06 19:11 J -20054989.86 -20054989.70 -20054989.52 0.0062 0.0017

Mercury -59621-09-02 20:23 J -20054901.81 -20054901.65 -20054901.47 0.0062 0.0022

Mercury -59621-11-29 21:35 J -20054813.75 -20054813.60 -20054813.43 0.0062 0.0027

Mercury -59620-02-25 22:47 J -20054725.69 -20054725.55 -20054725.39 0.0062 0.0033

Mercury -59620-05-24 23:59 J -20054637.63 -20054637.50 -20054637.34 0.0062 0.0038

Mercury -59620-08-21 01:11 J -20054549.56 -20054549.45 -20054549.30 0.0063 0.0043

Mercury -59620-11-17 02:37 J -20054461.49 -20054461.39 -20054461.27 0.0063 0.0048

Mercury -59619-02-13 03:49 J -20054373.42 -20054373.34 -20054373.24 0.0063 0.0053

Mercury -59619-05-12 04:47 J -20054285.34 -20054285.30 -20054285.21 0.0063 0.0059

Earth -59617-11-30 21:35 J -20053351.84 -20053351.60 -20053351.33 0.0064 0.0012

Moon -59617-12-01 00:57 J -20053351.72 -20053351.46 -20053351.20 0.0064 0.0012 \*

Mars -59614-09-04 18:28 J -20052344.06 -20052343.73 -20052343.40 0.0065 0.0000

Venus -59606-03-28 09:35 J -20049582.13 -20049582.10 -20049582.04 0.0068 0.0066

Venus -59606-11-08 15:21 J -20049357.05 -20049356.86 -20049356.63 0.0068 0.0026

Venus -59605-06-20 21:35 J -20049131.81 -20049131.60 -20049131.38 0.0068 0.0016

Venus -59604-02-01 03:06 J -20048906.46 -20048906.37 -20048906.22 0.0068 0.0058

Mercury -59533-12-18 22:47 J -20022652.61 -20022652.55 -20022652.47 0.0083 0.0074

Mercury -59532-03-17 00:28 J -20022564.56 -20022564.48 -20022564.38 0.0083 0.0064

Mercury -59532-06-13 02:09 J -20022476.51 -20022476.41 -20022476.30 0.0083 0.0054

Mercury -59532-09-09 03:35 J -20022388.46 -20022388.35 -20022388.22 0.0083 0.0044

Mercury -59532-12-06 05:16 J -20022300.40 -20022300.28 -20022300.14 0.0083 0.0034

Mercury -59531-03-04 06:57 J -20022212.34 -20022212.21 -20022212.07 0.0083 0.0024

Mercury -59531-05-31 08:23 J -20022124.28 -20022124.15 -20022124.00 0.0083 0.0015

Mercury -59531-08-27 10:04 J -20022036.22 -20022036.08 -20022035.94 0.0083 0.0005

Mercury -59531-11-23 11:30 J -20021948.16 -20021948.02 -20021947.87 0.0082 0.0005

Mercury -59530-02-19 12:57 J -20021860.09 -20021859.96 -20021859.81 0.0082 0.0015

Mercury -59530-05-18 14:37 J -20021772.03 -20021771.89 -20021771.75 0.0082 0.0023

Mercury -59530-08-14 16:04 J -20021683.96 -20021683.83 -20021683.70 0.0082 0.0032

Mercury -59530-11-10 17:16 J -20021595.89 -20021595.78 -20021595.64 0.0082 0.0042

Mercury -59529-02-06 18:42 J -20021507.82 -20021507.72 -20021507.60 0.0082 0.0051

Mercury -59529-05-04 20:09 J -20021419.74 -20021419.66 -20021419.55 0.0082 0.0060



Mercury -59529-07-31 21:35 J -20021331.66 -20021331.60 -20021331.51 0.0081 0.0069

Mercury -59529-10-27 23:01 J -20021243.57 -20021243.54 -20021243.48 0.0081 0.0078

Earth -59527-06-07 19:40 J -20020655.76 -20020655.68 -20020655.54 0.0080 0.0073

Moon -59527-06-07 22:18 J -20020655.67 -20020655.57 -20020655.44 0.0080 0.0071 \*

Venus -59520-01-25 14:37 J -20018231.96 -20018231.89 -20018231.80 0.0077 0.0071

Venus -59520-09-07 23:16 J -20018006.74 -20018006.53 -20018006.31 0.0076 0.0014

Venus -59519-04-21 07:40 J -20017781.35 -20017781.18 -20017780.99 0.0076 0.0042

Mercury -59378-09-07 11:30 J -19966142.03 -19966142.02 -19966141.98 0.0061 0.0060

Mercury -59378-12-04 12:57 J -19966054.03 -19966053.96 -19966053.89 0.0061 0.0056

Mercury -59377-03-01 13:40 J -19965966.01 -19965965.93 -19965965.82 0.0061 0.0051

Mercury -59377-05-28 14:52 J -19965877.98 -19965877.88 -19965877.76 0.0061 0.0047

Mercury -59377-08-24 15:49 J -19965789.95 -19965789.84 -19965789.70 0.0061 0.0042

Mercury -59377-11-20 17:01 J -19965701.91 -19965701.79 -19965701.64 0.0061 0.0037

Mercury -59376-02-16 18:13 J -19965613.88 -19965613.74 -19965613.58 0.0061 0.0033

Mercury -59376-05-15 19:25 J -19965525.84 -19965525.69 -19965525.53 0.0061 0.0028

Mercury -59376-08-11 20:23 J -19965437.80 -19965437.65 -19965437.47 0.0062 0.0024

Mercury -59376-11-07 21:35 J -19965349.76 -19965349.60 -19965349.42 0.0062 0.0019

Mercury -59375-02-03 22:47 J -19965261.71 -19965261.55 -19965261.37 0.0062 0.0014

Mercury -59375-05-02 23:59 J -19965173.67 -19965173.50 -19965173.32 0.0062 0.0009

Mercury -59375-07-30 01:25 J -19965085.62 -19965085.44 -19965085.27 0.0062 0.0004

Mercury -59375-10-26 02:37 J -19964997.57 -19964997.39 -19964997.22 0.0062 0.0001

Mercury -59374-01-22 03:35 J -19964909.52 -19964909.35 -19964909.17 0.0062 0.0006

Mercury -59374-04-20 04:47 J -19964821.47 -19964821.30 -19964821.12 0.0062 0.0011

Mercury -59374-07-17 05:59 J -19964733.41 -19964733.25 -19964733.07 0.0062 0.0016

Mercury -59374-10-13 06:57 J -19964645.36 -19964645.21 -19964645.03 0.0062 0.0022

Mercury -59373-01-09 08:09 J -19964557.30 -19964557.16 -19964556.98 0.0062 0.0027

Mercury -59373-04-06 09:21 J -19964469.24 -19964469.11 -19964468.94 0.0062 0.0032

Mercury -59373-07-03 10:33 J -19964381.18 -19964381.06 -19964380.89 0.0062 0.0037

Mercury -59373-09-29 11:45 J -19964293.12 -19964293.01 -19964292.85 0.0063 0.0042

Mercury -59373-12-26 13:11 J -19964205.05 -19964204.95 -19964204.82 0.0063 0.0047

Mercury -59372-03-24 14:23 J -19964116.98 -19964116.90 -19964116.78 0.0063 0.0052

Mercury -59372-06-20 15:49 J -19964028.90 -19964028.84 -19964028.76 0.0063 0.0057

Mercury -59372-09-16 17:01 J -19963940.80 -19963940.79 -19963940.75 0.0063 0.0062

Earth -59370-12-03 03:35 J -19963133.59 -19963133.35 -19963133.09 0.0064 0.0015

Moon -59370-12-03 07:11 J -19963133.44 -19963133.20 -19963132.94 0.0064 0.0017 \*

Venus -59359-07-19 07:11 J -19959252.32 -19959252.20 -19959252.04 0.0068 0.0052

Venus -59358-03-01 13:25 J -19959027.16 -19959026.94 -19959026.71 0.0068 0.0011

Venus -59358-10-12 19:25 J -19958801.88 -19958801.69 -19958801.48 0.0068 0.0031

Mercury -59285-01-28 10:04 J -19932396.13 -19932396.08 -19932396.01 0.0083 0.0076

Mercury -59285-04-25 11:45 J -19932308.09 -19932308.01 -19932307.91 0.0083 0.0066

Mercury -59285-07-22 13:25 J -19932220.04 -19932219.94 -19932219.82 0.0083 0.0056

Mercury -59285-10-18 15:21 J -19932131.98 -19932131.86 -19932131.74 0.0083 0.0045

Mercury -59284-01-14 16:33 J -19932043.93 -19932043.81 -19932043.67 0.0083 0.0036

Mercury -59284-04-12 18:28 J -19931955.87 -19931955.73 -19931955.60 0.0083 0.0026

Mercury -59284-07-09 19:54 J -19931867.81 -19931867.67 -19931867.53 0.0083 0.0016

Mercury -59284-10-05 21:35 J -19931779.75 -19931779.60 -19931779.46 0.0082 0.0007

Mercury -59283-01-01 23:01 J -19931691.68 -19931691.54 -19931691.40 0.0082 0.0003

Mercury -59283-03-31 00:28 J -19931603.62 -19931603.48 -19931603.33 0.0082 0.0012

Mercury -59283-06-27 01:54 J -19931515.55 -19931515.42 -19931515.27 0.0082 0.0022

Mercury -59283-09-23 03:35 J -19931427.48 -19931427.35 -19931427.22 0.0082 0.0030

Mercury -59283-12-20 04:47 J -19931339.41 -19931339.30 -19931339.16 0.0082 0.0040

Mercury -59282-03-18 06:13 J -19931251.34 -19931251.24 -19931251.11 0.0082 0.0049

Mercury -59282-06-14 07:40 J -19931163.27 -19931163.18 -19931163.07 0.0082 0.0058

Mercury -59282-09-10 09:06 J -19931075.19 -19931075.12 -19931075.03 0.0081 0.0067

Mercury -59282-12-07 10:33 J -19930987.10 -19930987.06 -19930986.99 0.0081 0.0075

Earth -59280-06-08 22:47 J -19930437.70 -19930437.55 -19930437.35 0.0080 0.0059

Moon -59280-06-08 23:45 J -19930437.67 -19930437.51 -19930437.32 0.0080 0.0057 \*

Venus -59273-05-18 12:57 J -19927902.09 -19927901.96 -19927901.78 0.0077 0.0054

Venus -59273-12-29 21:49 J -19927676.80 -19927676.59 -19927676.37 0.0076 0.0004

Venus -59272-08-12 05:30 J -19927451.37 -19927451.27 -19927451.11 0.0076 0.0060

Mercury -59130-01-12 22:04 J -19875797.59 -19875797.58 -19875797.53 0.0061 0.0060

Mercury -59130-04-10 23:16 J -19875709.59 -19875709.53 -19875709.44 0.0061 0.0056

Mercury -59130-07-08 00:13 J -19875621.57 -19875621.49 -19875621.38 0.0061 0.0051

Mercury -59130-10-04 01:25 J -19875533.54 -19875533.44 -19875533.31 0.0061 0.0046

Mercury -59130-12-31 02:37 J -19875445.51 -19875445.39 -19875445.25 0.0061 0.0042

Mercury -59129-03-28 03:35 J -19875357.47 -19875357.35 -19875357.19 0.0061 0.0037

Mercury -59129-06-24 04:47 J -19875269.44 -19875269.30 -19875269.14 0.0061 0.0033

Mercury -59129-09-20 05:59 J -19875181.40 -19875181.25 -19875181.08 0.0062 0.0028

Mercury -59129-12-17 07:11 J -19875093.36 -19875093.20 -19875093.03 0.0062 0.0023

Mercury -59128-03-15 08:09 J -19875005.31 -19875005.16 -19875004.98 0.0062 0.0019

Mercury -59128-06-11 09:21 J -19874917.27 -19874917.11 -19874916.93 0.0062 0.0014

Mercury -59128-09-07 10:33 J -19874829.23 -19874829.06 -19874828.88 0.0062 0.0009

Mercury -59128-12-04 11:59 J -19874741.18 -19874741.00 -19874740.83 0.0062 0.0004

Mercury -59127-03-02 13:11 J -19874653.13 -19874652.95 -19874652.78 0.0062 0.0001

Mercury -59127-05-29 14:23 J -19874565.08 -19874564.90 -19874564.73 0.0062 0.0006

Mercury -59127-08-25 15:21 J -19874477.03 -19874476.86 -19874476.68 0.0062 0.0011

Mercury -59127-11-21 16:33 J -19874388.98 -19874388.81 -19874388.63 0.0062 0.0016

Mercury -59126-02-17 17:45 J -19874300.92 -19874300.76 -19874300.59 0.0062 0.0021

Mercury -59126-05-16 18:42 J -19874212.86 -19874212.72 -19874212.54 0.0062 0.0027

Mercury -59126-08-12 19:54 J -19874124.80 -19874124.67 -19874124.50 0.0062 0.0032

Mercury -59126-11-08 21:06 J -19874036.74 -19874036.62 -19874036.46 0.0062 0.0037

Mercury -59125-02-04 22:33 J -19873948.68 -19873948.56 -19873948.42 0.0063 0.0042

Mercury -59125-05-02 23:45 J -19873860.61 -19873860.51 -19873860.38 0.0063 0.0047

Mercury -59125-07-30 00:57 J -19873772.54 -19873772.46 -19873772.34 0.0063 0.0052

Mercury -59125-10-26 02:23 J -19873684.46 -19873684.40 -19873684.32 0.0063 0.0057

Mercury -59124-01-22 03:49 J -19873596.36 -19873596.34 -19873596.32 0.0063 0.0062

Earth -59123-12-04 04:47 J -19872915.53 -19872915.30 -19872915.08 0.0063 0.0031

Moon -59123-12-04 07:25 J -19872915.41 -19872915.19 -19872914.95 0.0063 0.0028 \*

Moon -59122-12-05 11:59 J -19872549.15 -19872549.00 -19872548.78 0.0064 0.0045

Earth -59122-12-05 16:04 J -19872548.98 -19872548.83 -19872548.64 0.0064 0.0048 \*

Venus -59112-11-09 01:54 J -19868922.56 -19868922.42 -19868922.25 0.0068 0.0048

Venus -59111-06-22 07:54 J -19868697.38 -19868697.17 -19868696.94 0.0068 0.0007

Venus -59110-02-02 14:09 J -19868472.10 -19868471.91 -19868471.72 0.0068 0.0035

Mercury -59038-03-08 20:23 J -19842139.66 -19842139.65 -19842139.62 0.0083 0.0083

Mercury -59038-06-04 22:04 J -19842051.64 -19842051.58 -19842051.50 0.0083 0.0073

Mercury -59038-08-31 23:45 J -19841963.60 -19841963.51 -19841963.41 0.0083 0.0063

Mercury -59038-11-28 01:11 J -19841875.55 -19841875.45 -19841875.33 0.0083 0.0053

Mercury -59037-02-24 02:52 J -19841787.49 -19841787.38 -19841787.25 0.0083 0.0043

Mercury -59037-05-22 04:33 J -19841699.44 -19841699.31 -19841699.17 0.0083 0.0033

Mercury -59037-08-18 05:59 J -19841611.38 -19841611.25 -19841611.10 0.0083 0.0024

Mercury -59037-11-14 07:54 J -19841523.32 -19841523.17 -19841523.03 0.0083 0.0014

Mercury -59036-02-10 09:21 J -19841435.25 -19841435.11 -19841434.97 0.0082 0.0004

Mercury -59036-05-09 10:47 J -19841347.19 -19841347.05 -19841346.90 0.0082 0.0005

Mercury -59036-08-05 12:28 J -19841259.12 -19841258.98 -19841258.84 0.0082 0.0014

Mercury -59036-11-01 13:40 J -19841171.06 -19841170.93 -19841170.78 0.0082 0.0024

Mercury -59035-01-28 15:06 J -19841082.99 -19841082.87 -19841082.73 0.0082 0.0033

Mercury -59035-04-26 16:47 J -19840994.92 -19840994.80 -19840994.67 0.0082 0.0042

Mercury -59035-07-23 18:13 J -19840906.85 -19840906.74 -19840906.62 0.0082 0.0051

Mercury -59035-10-19 19:40 J -19840818.77 -19840818.68 -19840818.58 0.0082 0.0060

Mercury -59034-01-15 21:06 J -19840730.69 -19840730.62 -19840730.54 0.0081 0.0068

Mercury -59034-04-13 22:18 J -19840642.60 -19840642.57 -19840642.51 0.0081 0.0078

Moon -59033-06-09 19:11 J -19840219.92 -19840219.70 -19840219.45 0.0081 0.0030

Earth -59033-06-09 19:40 J -19840219.91 -19840219.68 -19840219.42 0.0081 0.0026 \*

Mars -59032-12-05 21:21 J -19839675.89 -19839675.61 -19839675.30 0.0080 0.0020

Venus -59026-09-09 08:37 J -19837572.30 -19837572.14 -19837571.95 0.0077 0.0046

Venus -59025-04-21 17:16 J -19837346.99 -19837346.78 -19837346.56 0.0076 0.0012

Venus -59025-12-03 01:25 J -19837121.53 -19837121.44 -19837121.33 0.0076 0.0067

# 59TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 59th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-58883-05-20 08:23 J	-19785453.15	-19785453.15	-19785453.12	0.0061	0.0061		
Mercury	-58883-08-16 09:35 J	-19785365.16	-19785365.10	-19785365.03	0.0061	0.0056		
Mercury	-58883-11-12 10:18 J	-19785277.14	-19785277.07	-19785276.95	0.0061	0.0052		
Mercury	-58882-02-08 11:45 J	-19785189.11	-19785189.01	-19785188.89	0.0061	0.0047		
Mercury	-58882-05-07 12:57 J	-19785101.08	-19785100.96	-19785100.83	0.0061	0.0043		
Mercury	-58882-08-03 13:40 J	-19785013.04	-19785012.93	-19785012.77	0.0061	0.0039		
Mercury	-58882-10-30 15:06 J	-19784925.01	-19784924.87	-19784924.71	0.0061	0.0034		
Mercury	-58881-01-26 16:18 J	-19784836.97	-19784836.82	-19784836.66	0.0061	0.0029		
Mercury	-58881-04-23 17:16 J	-19784748.93	-19784748.78	-19784748.61	0.0062	0.0024		
Mercury	-58881-07-20 18:28 J	-19784660.89	-19784660.73	-19784660.55	0.0062	0.0020		
Mercury	-58881-10-16 19:40 J	-19784572.84	-19784572.68	-19784572.50	0.0062	0.0015		
Mercury	-58880-01-12 20:52 J	-19784484.80	-19784484.63	-19784484.45	0.0062	0.0010		
Mercury	-58880-04-10 22:04 J	-19784396.75	-19784396.58	-19784396.40	0.0062	0.0005		
Mercury	-58880-07-07 23:16 J	-19784308.70	-19784308.53	-19784308.35	0.0062	0.0001		
Mercury	-58880-10-04 00:28 J	-19784220.66	-19784220.48	-19784220.30	0.0062	0.0005		
Mercury	-58880-12-31 01:25 J	-19784132.60	-19784132.44	-19784132.26	0.0062	0.0010		
Mercury	-58879-03-29 02:37 J	-19784044.55	-19784044.39	-19784044.21	0.0062	0.0015		
Mercury	-58879-06-25 04:04 J	-19783956.50	-19783956.33	-19783956.16	0.0062	0.0020		
Mercury	-58879-09-21 05:16 J	-19783868.44	-19783868.28	-19783868.12	0.0062	0.0025		
Mercury	-58879-12-18 06:28 J	-19783780.39	-19783780.23	-19783780.07	0.0062	0.0030		
Mercury	-58878-03-16 07:40 J	-19783692.33	-19783692.18	-19783692.03	0.0062	0.0035		
Mercury	-58878-06-12 08:52 J	-19783604.26	-19783604.13	-19783603.99	0.0063	0.0040		

Mercury -58878-09-08 09:35 J -19783516.20 -19783516.10 -19783515.95 0.0063 0.0046  
 Mercury -58878-12-05 10:47 J -19783428.13 -19783428.05 -19783427.92 0.0063 0.0051  
 Mercury -58877-03-02 12:13 J -19783340.05 -19783339.99 -19783339.89 0.0063 0.0056  
 Mercury -58877-05-29 13:25 J -19783251.96 -19783251.94 -19783251.88 0.0063 0.0061  
 Earth -58876-12-05 03:21 J -19782697.48 -19782697.36 -19782697.19 0.0063 0.0053  
 Moon -58876-12-05 05:01 J -19782697.40 -19782697.29 -19782697.15 0.0063 0.0055 \*  
 Moon -58875-12-06 11:59 J -19782331.23 -19782331.00 -19782330.76 0.0064 0.0027  
 Earth -58875-12-06 15:06 J -19782331.09 -19782330.87 -19782330.62 0.0064 0.0026 \*  
 Mars -58873-09-22 08:52 J -19781675.34 -19781675.13 -19781674.85 0.0064 0.0043  
 Venus -58864-03-01 18:57 J -19778592.87 -19778592.71 -19778592.56 0.0068 0.0048  
 Venus -58864-10-13 00:57 J -19778367.68 -19778367.46 -19778367.24 0.0068 0.0007  
 Venus -58863-05-26 06:42 J -19778142.40 -19778142.22 -19778142.02 0.0068 0.0035  
 Mercury -58791-10-10 08:52 J -19751707.19 -19751707.13 -19751707.06 0.0083 0.0074  
 Mercury -58790-01-06 10:33 J -19751619.15 -19751619.06 -19751618.97 0.0083 0.0064  
 Mercury -58790-04-04 11:45 J -19751531.10 -19751531.01 -19751530.88 0.0083 0.0056  
 Mercury -58790-07-01 13:40 J -19751443.05 -19751442.93 -19751442.80 0.0083 0.0045  
 Mercury -58790-09-27 15:21 J -19751354.99 -19751354.86 -19751354.73 0.0083 0.0035  
 Mercury -58790-12-24 16:47 J -19751266.93 -19751266.80 -19751266.66 0.0083 0.0026  
 Mercury -58789-03-21 18:28 J -19751178.87 -19751178.73 -19751178.59 0.0083 0.0016  
 Mercury -58789-06-17 20:09 J -19751090.81 -19751090.66 -19751090.52 0.0082 0.0007  
 Mercury -58789-09-13 21:35 J -19751002.74 -19751002.60 -19751002.46 0.0082 0.0003  
 Mercury -58789-12-10 23:01 J -19750914.68 -19750914.54 -19750914.40 0.0082 0.0012  
 Mercury -58788-03-09 00:28 J -19750826.61 -19750826.48 -19750826.34 0.0082 0.0022  
 Mercury -58788-06-05 01:54 J -19750738.55 -19750738.42 -19750738.28 0.0082 0.0031  
 Mercury -58788-09-01 03:21 J -19750650.48 -19750650.36 -19750650.23 0.0082 0.0040  
 Mercury -58788-11-28 04:47 J -19750562.40 -19750562.30 -19750562.18 0.0082 0.0049  
 Mercury -58787-02-24 06:13 J -19750474.33 -19750474.24 -19750474.13 0.0081 0.0058  
 Mercury -58787-05-23 07:40 J -19750386.25 -19750386.18 -19750386.09 0.0081 0.0067  
 Mercury -58787-08-19 09:06 J -19750298.16 -19750298.12 -19750298.06 0.0081 0.0075  
 Moon -58786-06-11 08:52 J -19750002.35 -19750002.13 -19750001.88 0.0081 0.0030

Earth -58786-06-11 10:33 J -19750002.28 -19750002.06 -19750001.79 0.0081 0.0028 \*  
 Venus -58779-12-31 01:25 J -19747242.60 -19747242.44 -19747242.27 0.0077 0.0050  
 Venus -58778-08-13 09:49 J -19747017.30 -19747017.09 -19747016.87 0.0076 0.0008  
 Venus -58777-03-25 18:13 J -19746791.86 -19746791.74 -19746791.62 0.0076 0.0063  
 Mercury -58636-12-21 18:28 J -19695020.74 -19695020.73 -19695020.69 0.0061 0.0060  
 Mercury -58635-03-19 19:54 J -19694932.74 -19694932.67 -19694932.60 0.0061 0.0056  
 Mercury -58635-06-15 20:37 J -19694844.72 -19694844.64 -19694844.53 0.0061 0.0051  
 Mercury -58635-09-11 21:49 J -19694756.69 -19694756.59 -19694756.47 0.0061 0.0047  
 Mercury -58635-12-08 22:47 J -19694668.66 -19694668.55 -19694668.41 0.0061 0.0042  
 Mercury -58634-03-06 23:59 J -19694580.62 -19694580.50 -19694580.35 0.0061 0.0038  
 Mercury -58634-06-03 01:25 J -19694492.59 -19694492.44 -19694492.29 0.0061 0.0033  
 Mercury -58634-08-30 02:09 J -19694404.55 -19694404.41 -19694404.24 0.0062 0.0029  
 Mercury -58634-11-26 03:21 J -19694316.51 -19694316.36 -19694316.18 0.0062 0.0024  
 Mercury -58633-02-22 04:33 J -19694228.47 -19694228.31 -19694228.13 0.0062 0.0019  
 Mercury -58633-05-20 05:59 J -19694140.42 -19694140.25 -19694140.08 0.0062 0.0014  
 Mercury -58633-08-16 07:11 J -19694052.38 -19694052.20 -19694052.03 0.0062 0.0009  
 Mercury -58633-11-12 08:09 J -19693964.33 -19693964.16 -19693963.98 0.0062 0.0005  
 Mercury -58632-02-08 09:21 J -19693876.28 -19693876.11 -19693875.93 0.0062 0.0001  
 Mercury -58632-05-07 10:33 J -19693788.23 -19693788.06 -19693787.88 0.0062 0.0005  
 Mercury -58632-08-03 11:45 J -19693700.18 -19693700.01 -19693699.83 0.0062 0.0010  
 Mercury -58632-10-30 12:57 J -19693612.13 -19693611.96 -19693611.79 0.0062 0.0015  
 Mercury -58631-01-26 13:54 J -19693524.08 -19693523.92 -19693523.74 0.0062 0.0021  
 Mercury -58631-04-24 15:06 J -19693436.02 -19693435.87 -19693435.70 0.0062 0.0026  
 Mercury -58631-07-21 16:18 J -19693347.96 -19693347.82 -19693347.65 0.0062 0.0031  
 Mercury -58631-10-17 17:30 J -19693259.90 -19693259.77 -19693259.61 0.0063 0.0036  
 Mercury -58630-01-13 18:42 J -19693171.84 -19693171.72 -19693171.57 0.0063 0.0041  
 Mercury -58630-04-11 19:54 J -19693083.77 -19693083.67 -19693083.53 0.0063 0.0046  
 Mercury -58630-07-08 21:21 J -19692995.70 -19692995.61 -19692995.50 0.0063 0.0051  
 Mercury -58630-10-04 22:33 J -19692907.63 -19692907.56 -19692907.47 0.0063 0.0056  
 Mercury -58630-12-31 23:59 J -19692819.53 -19692819.50 -19692819.46 0.0063 0.0061

Moon -58628-12-07 07:25 J -19692113.45 -19692113.19 -19692112.92 0.0064 0.0006  
 Earth -58628-12-07 10:04 J -19692113.34 -19692113.08 -19692112.83 0.0064 0.0008 \*  
 Venus -58617-06-22 08:37 J -19688263.24 -19688263.14 -19688263.01 0.0068 0.0058  
 Venus -58616-02-02 14:37 J -19688038.10 -19688037.89 -19688037.66 0.0068 0.0017  
 Venus -58616-09-15 20:52 J -19687812.84 -19687812.63 -19687812.42 0.0068 0.0025  
 Venus -58615-04-29 02:52 J -19687587.42 -19687587.38 -19687587.33 0.0068 0.0067  
 Mercury -58543-02-14 18:42 J -19661362.75 -19661362.72 -19661362.68 0.0083 0.0081  
 Mercury -58543-05-13 20:23 J -19661274.72 -19661274.65 -19661274.58 0.0083 0.0071  
 Mercury -58543-08-09 21:35 J -19661186.68 -19661186.60 -19661186.49 0.0083 0.0062  
 Mercury -58543-11-05 23:30 J -19661098.63 -19661098.52 -19661098.40 0.0083 0.0051  
 Mercury -58542-02-02 01:11 J -19661010.57 -19661010.45 -19661010.32 0.0083 0.0041  
 Mercury -58542-05-01 02:37 J -19660922.52 -19660922.39 -19660922.25 0.0083 0.0032  
 Mercury -58542-07-28 04:18 J -19660834.46 -19660834.32 -19660834.18 0.0083 0.0022  
 Mercury -58542-10-24 05:45 J -19660746.40 -19660746.26 -19660746.11 0.0082 0.0013  
 Mercury -58541-01-20 07:25 J -19660658.33 -19660658.19 -19660658.05 0.0082 0.0003  
 Mercury -58541-04-17 08:52 J -19660570.27 -19660570.13 -19660569.98 0.0082 0.0007  
 Mercury -58541-07-14 10:18 J -19660482.20 -19660482.07 -19660481.92 0.0082 0.0016  
 Mercury -58541-10-10 11:45 J -19660394.14 -19660394.01 -19660393.86 0.0082 0.0025  
 Mercury -58540-01-06 13:25 J -19660306.07 -19660305.94 -19660305.81 0.0082 0.0034  
 Mercury -58540-04-04 14:52 J -19660218.00 -19660217.88 -19660217.76 0.0082 0.0043  
 Mercury -58540-07-01 16:18 J -19660129.92 -19660129.82 -19660129.71 0.0082 0.0052  
 Mercury -58540-09-27 17:45 J -19660041.85 -19660041.76 -19660041.66 0.0081 0.0061  
 Mercury -58540-12-24 18:57 J -19659953.77 -19659953.71 -19659953.62 0.0081 0.0070  
 Mercury -58539-03-22 20:23 J -19659865.67 -19659865.65 -19659865.60 0.0081 0.0078  
 Earth -58538-06-14 02:37 J -19659417.51 -19659417.39 -19659417.21 0.0080 0.0066  
 Moon -58538-06-14 05:30 J -19659417.41 -19659417.27 -19659417.11 0.0080 0.0066 \*  
 Mars -58537-08-04 09:49 J -19659000.39 -19659000.09 -19658999.79 0.0080 0.0018  
 Venus -58531-04-22 15:49 J -19656912.96 -19656912.84 -19656912.71 0.0077 0.0062  
 Venus -58531-12-04 00:13 J -19656687.70 -19656687.49 -19656687.27 0.0076 0.0005  
 Venus -58530-07-17 08:09 J -19656462.30 -19656462.16 -19656461.99 0.0076 0.0052



Mercury -58388-07-25 04:18 J -19604588.33 -19604588.32 -19604588.29 0.0061 0.0060

Mercury -58388-10-21 05:01 J -19604500.33 -19604500.29 -19604500.20 0.0061 0.0056

Mercury -58387-01-17 06:28 J -19604412.31 -19604412.23 -19604412.13 0.0061 0.0051

Mercury -58387-04-15 07:11 J -19604324.29 -19604324.20 -19604324.06 0.0061 0.0048

Mercury -58387-07-12 08:37 J -19604236.25 -19604236.14 -19604236.00 0.0061 0.0042

Mercury -58387-10-08 09:49 J -19604148.22 -19604148.09 -19604147.95 0.0061 0.0038

Mercury -58386-01-04 10:47 J -19604060.18 -19604060.05 -19604059.89 0.0061 0.0033

Mercury -58386-04-02 11:59 J -19603972.14 -19603972.00 -19603971.83 0.0062 0.0029

Mercury -58386-06-29 13:11 J -19603884.10 -19603883.95 -19603883.78 0.0062 0.0024

Mercury -58386-09-25 14:37 J -19603796.06 -19603795.89 -19603795.73 0.0062 0.0019

Mercury -58386-12-22 15:21 J -19603708.02 -19603707.86 -19603707.68 0.0062 0.0015

Mercury -58385-03-19 16:33 J -19603619.97 -19603619.81 -19603619.63 0.0062 0.0010

Mercury -58385-06-15 17:59 J -19603531.93 -19603531.75 -19603531.58 0.0062 0.0005

Mercury -58385-09-11 19:11 J -19603443.88 -19603443.70 -19603443.53 0.0062 0.0001

Mercury -58385-12-08 20:09 J -19603355.83 -19603355.66 -19603355.48 0.0062 0.0005

Mercury -58384-03-06 21:21 J -19603267.78 -19603267.61 -19603267.43 0.0062 0.0010

Mercury -58384-06-02 22:18 J -19603179.73 -19603179.57 -19603179.38 0.0062 0.0016

Mercury -58384-08-29 23:45 J -19603091.67 -19603091.51 -19603091.34 0.0062 0.0020

Mercury -58384-11-26 00:57 J -19603003.62 -19603003.46 -19603003.29 0.0062 0.0025

Mercury -58383-02-22 02:09 J -19602915.56 -19602915.41 -19602915.25 0.0062 0.0030

Mercury -58383-05-21 03:21 J -19602827.50 -19602827.36 -19602827.21 0.0063 0.0035

Mercury -58383-08-17 04:33 J -19602739.44 -19602739.31 -19602739.17 0.0063 0.0040

Mercury -58383-11-13 05:45 J -19602651.37 -19602651.26 -19602651.13 0.0063 0.0045

Mercury -58382-02-09 07:11 J -19602563.30 -19602563.20 -19602563.09 0.0063 0.0050

Mercury -58382-05-08 07:54 J -19602475.23 -19602475.17 -19602475.06 0.0063 0.0056

Mercury -58382-08-04 09:06 J -19602387.14 -19602387.12 -19602387.05 0.0063 0.0061

Moon -58381-12-08 01:40 J -19601895.57 -19601895.43 -19601895.23 0.0063 0.0049

Earth -58381-12-08 02:52 J -19601895.54 -19601895.38 -19601895.18 0.0063 0.0046 \*

Earth -58380-12-09 14:09 J -19601529.10 -19601528.91 -19601528.66 0.0064 0.0033

Moon -58380-12-09 16:33 J -19601529.00 -19601528.81 -19601528.58 0.0064 0.0036 \*

Mars -58378-05-22 08:09 J -19601000.24 -19601000.16 -19600999.99 0.0064 0.0060  
 Venus -58369-05-26 03:06 J -19597708.55 -19597708.37 -19597708.15 0.0068 0.0031  
 Venus -58368-01-06 09:21 J -19597483.32 -19597483.11 -19597482.88 0.0068 0.0011  
 Venus -58368-08-19 14:52 J -19597257.99 -19597257.88 -19597257.72 0.0068 0.0054  
 Mercury -58296-09-18 04:47 J -19570930.31 -19570930.30 -19570930.26 0.0083 0.0082  
 Mercury -58296-12-15 06:28 J -19570842.29 -19570842.23 -19570842.14 0.0083 0.0072  
 Mercury -58295-03-13 08:09 J -19570754.25 -19570754.16 -19570754.05 0.0083 0.0062  
 Mercury -58295-06-09 09:35 J -19570666.20 -19570666.10 -19570665.97 0.0083 0.0052  
 Mercury -58295-09-05 11:30 J -19570578.14 -19570578.02 -19570577.89 0.0083 0.0042  
 Mercury -58295-12-02 13:11 J -19570490.08 -19570489.95 -19570489.82 0.0083 0.0032  
 Mercury -58294-02-28 14:37 J -19570402.03 -19570401.89 -19570401.75 0.0083 0.0023  
 Mercury -58294-05-27 16:04 J -19570313.96 -19570313.83 -19570313.68 0.0082 0.0014  
 Mercury -58294-08-23 17:45 J -19570225.90 -19570225.76 -19570225.61 0.0082 0.0004  
 Mercury -58294-11-19 19:11 J -19570137.84 -19570137.70 -19570137.55 0.0082 0.0006  
 Mercury -58293-02-15 20:52 J -19570049.77 -19570049.63 -19570049.49 0.0082 0.0015  
 Mercury -58293-05-13 22:18 J -19569961.71 -19569961.57 -19569961.43 0.0082 0.0024  
 Mercury -58293-08-09 23:45 J -19569873.64 -19569873.51 -19569873.38 0.0082 0.0033  
 Mercury -58293-11-06 01:11 J -19569785.57 -19569785.45 -19569785.32 0.0082 0.0042  
 Mercury -58292-02-02 02:52 J -19569697.50 -19569697.38 -19569697.27 0.0081 0.0051  
 Mercury -58292-05-01 04:04 J -19569609.42 -19569609.33 -19569609.23 0.0081 0.0060  
 Mercury -58292-07-28 05:30 J -19569521.34 -19569521.27 -19569521.19 0.0081 0.0068  
 Mercury -58292-10-24 06:42 J -19569433.25 -19569433.22 -19569433.16 0.0081 0.0077  
 Earth -58291-06-14 08:52 J -19569200.38 -19569200.13 -19569199.88 0.0081 0.0020  
 Moon -58291-06-14 11:59 J -19569200.25 -19569200.00 -19569199.74 0.0081 0.0024 \*  
 Venus -58283-03-26 11:16 J -19566358.22 -19566358.03 -19566357.81 0.0076 0.0028  
 Venus -58283-11-06 19:40 J -19566132.87 -19566132.68 -19566132.47 0.0076 0.0030  
 Mercury -58140-05-24 13:40 J -19514067.95 -19514067.93 -19514067.85 0.0061 0.0060  
 Mercury -58140-08-20 15:06 J -19513979.93 -19513979.87 -19513979.78 0.0061 0.0054  
 Mercury -58140-11-16 16:33 J -19513891.91 -19513891.81 -19513891.71 0.0061 0.0050  
 Mercury -58139-02-12 17:16 J -19513803.88 -19513803.78 -19513803.65 0.0061 0.0046

Mercury -58139-05-11 18:28 J -19513715.85 -19513715.73 -19513715.59 0.0061 0.0041  
 Mercury -58139-08-07 19:25 J -19513627.81 -19513627.69 -19513627.53 0.0061 0.0037  
 Mercury -58139-11-03 20:37 J -19513539.77 -19513539.64 -19513539.48 0.0062 0.0032  
 Mercury -58138-01-30 22:04 J -19513451.74 -19513451.58 -19513451.42 0.0062 0.0027  
 Mercury -58138-04-28 23:16 J -19513363.69 -19513363.53 -19513363.37 0.0062 0.0022  
 Mercury -58138-07-26 00:13 J -19513275.65 -19513275.49 -19513275.32 0.0062 0.0018  
 Mercury -58138-10-22 01:25 J -19513187.61 -19513187.44 -19513187.26 0.0062 0.0013  
 Mercury -58137-01-18 02:37 J -19513099.56 -19513099.39 -19513099.21 0.0062 0.0008  
 Mercury -58137-04-15 03:49 J -19513011.51 -19513011.34 -19513011.16 0.0062 0.0003  
 Mercury -58137-07-12 05:01 J -19512923.47 -19512923.29 -19512923.11 0.0062 0.0002  
 Mercury -58137-10-08 06:13 J -19512835.42 -19512835.24 -19512835.07 0.0062 0.0007  
 Mercury -58136-01-04 07:25 J -19512747.37 -19512747.19 -19512747.02 0.0062 0.0011  
 Mercury -58136-04-02 08:23 J -19512659.31 -19512659.15 -19512658.97 0.0062 0.0017  
 Mercury -58136-06-29 09:35 J -19512571.26 -19512571.10 -19512570.93 0.0062 0.0022  
 Mercury -58136-09-25 10:47 J -19512483.20 -19512483.05 -19512482.88 0.0062 0.0027  
 Mercury -58136-12-22 11:59 J -19512395.14 -19512395.00 -19512394.84 0.0062 0.0032  
 Mercury -58135-03-20 13:11 J -19512307.08 -19512306.95 -19512306.80 0.0063 0.0037  
 Mercury -58135-06-16 14:23 J -19512219.02 -19512218.90 -19512218.76 0.0063 0.0042  
 Mercury -58135-09-12 15:35 J -19512130.95 -19512130.85 -19512130.72 0.0063 0.0047  
 Mercury -58135-12-09 16:47 J -19512042.88 -19512042.80 -19512042.69 0.0063 0.0052  
 Mercury -58134-03-07 18:13 J -19511954.80 -19511954.74 -19511954.66 0.0063 0.0057  
 Mercury -58134-06-03 19:25 J -19511866.70 -19511866.69 -19511866.66 0.0063 0.0062  
 Earth -58133-12-10 04:18 J -19511311.56 -19511311.32 -19511311.06 0.0063 0.0016  
 Moon -58133-12-10 05:01 J -19511311.51 -19511311.29 -19511311.03 0.0063 0.0018 \*  
 Moon -58132-12-11 12:13 J -19510944.99 -19510944.99 -19510944.93 0.0064 0.0064  
 Earth -58132-12-11 15:06 J -19510944.88 -19510944.87 -19510944.78 0.0064 0.0063  
 Mars -58130-08-31 05:30 J -19510317.49 -19510317.27 -19510317.00 0.0064 0.0043  
 Venus -58122-09-16 13:25 J -19507379.06 -19507378.94 -19507378.78 0.0068 0.0052  
 Venus -58121-04-28 19:25 J -19507153.90 -19507153.69 -19507153.45 0.0068 0.0011  
 Venus -58121-12-10 01:40 J -19506928.63 -19506928.43 -19506928.23 0.0068 0.0032

Mercury	-58048-07-18 16:18 J	-19480409.88	-19480409.82	-19480409.75	0.0083	0.0075
Mercury	-58048-10-14 17:45 J	-19480321.84	-19480321.76	-19480321.66	0.0083	0.0065
Mercury	-58047-01-10 19:25 J	-19480233.79	-19480233.69	-19480233.57	0.0083	0.0055
Mercury	-58047-04-08 21:21 J	-19480145.73	-19480145.61	-19480145.49	0.0083	0.0045
Mercury	-58047-07-05 22:47 J	-19480057.68	-19480057.55	-19480057.42	0.0083	0.0036
Mercury	-58047-10-02 00:28 J	-19479969.62	-19479969.48	-19479969.34	0.0083	0.0026
Mercury	-58047-12-29 01:54 J	-19479881.56	-19479881.42	-19479881.28	0.0082	0.0017
Mercury	-58046-03-27 03:35 J	-19479793.50	-19479793.35	-19479793.21	0.0082	0.0007
Mercury	-58046-06-23 05:01 J	-19479705.43	-19479705.29	-19479705.14	0.0082	0.0002
Mercury	-58046-09-19 06:28 J	-19479617.37	-19479617.23	-19479617.08	0.0082	0.0012
Mercury	-58046-12-16 07:54 J	-19479529.30	-19479529.17	-19479529.02	0.0082	0.0021
Mercury	-58045-03-13 09:21 J	-19479441.23	-19479441.11	-19479440.97	0.0082	0.0030
Mercury	-58045-06-09 10:47 J	-19479353.17	-19479353.05	-19479352.91	0.0082	0.0039
Mercury	-58045-09-05 12:13 J	-19479265.09	-19479264.99	-19479264.86	0.0081	0.0048
Mercury	-58045-12-02 13:40 J	-19479177.02	-19479176.93	-19479176.82	0.0081	0.0057
Mercury	-58044-02-28 15:06 J	-19479088.94	-19479088.87	-19479088.77	0.0081	0.0065
Mercury	-58044-05-27 16:47 J	-19479000.86	-19479000.80	-19479000.74	0.0081	0.0074
Moon	-58043-06-16 14:23 J	-19478616.10	-19478615.90	-19478615.67	0.0081	0.0042
Earth	-58043-06-16 16:47 J	-19478616.00	-19478615.80	-19478615.57	0.0081	0.0044 *
Venus	-58036-07-16 21:06 J	-19476028.76	-19476028.62	-19476028.46	0.0077	0.0056
Venus	-58035-02-27 05:45 J	-19475803.48	-19475803.26	-19475803.04	0.0076	0.0002
Venus	-58035-10-10 13:25 J	-19475578.05	-19475577.94	-19475577.78	0.0076	0.0059

# 58TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 58th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-57892-03-23 23:16 J	-19423547.56	-19423547.53	-19423547.46	0.0061	0.0058		
Mercury	-57892-06-20 00:28 J	-19423459.55	-19423459.48	-19423459.38	0.0061	0.0054		
Mercury	-57892-09-16 01:25 J	-19423371.52	-19423371.44	-19423371.32	0.0061	0.0049		
Mercury	-57892-12-13 02:37 J	-19423283.49	-19423283.39	-19423283.26	0.0061	0.0045		
Mercury	-57891-03-11 03:35 J	-19423195.46	-19423195.35	-19423195.20	0.0061	0.0041		
Mercury	-57891-06-07 04:47 J	-19423107.42	-19423107.30	-19423107.14	0.0061	0.0036		
Mercury	-57891-09-03 06:13 J	-19423019.39	-19423019.24	-19423019.08	0.0062	0.0031		
Mercury	-57891-11-30 07:25 J	-19422931.35	-19422931.19	-19422931.03	0.0062	0.0026		
Mercury	-57890-02-26 08:23 J	-19422843.31	-19422843.15	-19422842.98	0.0062	0.0022		
Mercury	-57890-05-25 09:35 J	-19422755.26	-19422755.10	-19422754.93	0.0062	0.0017		
Mercury	-57890-08-21 10:47 J	-19422667.22	-19422667.05	-19422666.87	0.0062	0.0012		
Mercury	-57890-11-17 11:59 J	-19422579.17	-19422579.00	-19422578.82	0.0062	0.0007		
Mercury	-57889-02-13 13:11 J	-19422491.13	-19422490.95	-19422490.77	0.0062	0.0002		
Mercury	-57889-05-11 14:23 J	-19422403.08	-19422402.90	-19422402.72	0.0062	0.0002		
Mercury	-57889-08-07 15:35 J	-19422315.03	-19422314.85	-19422314.68	0.0062	0.0007		
Mercury	-57889-11-03 16:33 J	-19422226.97	-19422226.81	-19422226.63	0.0062	0.0012		
Mercury	-57888-01-30 17:45 J	-19422138.92	-19422138.76	-19422138.58	0.0062	0.0017		
Mercury	-57888-04-28 18:42 J	-19422050.87	-19422050.72	-19422050.54	0.0062	0.0023		
Mercury	-57888-07-25 19:54 J	-19421962.81	-19421962.67	-19421962.49	0.0062	0.0028		
Mercury	-57888-10-21 21:35 J	-19421874.75	-19421874.60	-19421874.45	0.0063	0.0032		
Mercury	-57887-01-17 22:47 J	-19421786.69	-19421786.55	-19421786.41	0.0063	0.0037		
Mercury	-57887-04-15 23:59 J	-19421698.63	-19421698.50	-19421698.37	0.0063	0.0042		
Mercury	-57887-07-13 00:42 J	-19421610.56	-19421610.47	-19421610.33	0.0063	0.0048		
Mercury	-57887-10-09 01:54 J	-19421522.49	-19421522.42	-19421522.30	0.0063	0.0053		
Mercury	-57886-01-05 03:21 J	-19421434.41	-19421434.36	-19421434.27	0.0063	0.0058		
Mercury	-57886-04-03 05:01 J	-19421346.29	-19421346.29	-19421346.28	0.0063	0.0063		
Moon	-57885-12-12 01:40 J	-19420727.69	-19420727.43	-19420727.16	0.0064	0.0012		

Earth -57885-12-12 03:49 J -19420727.59 -19420727.34 -19420727.08 0.0064 0.0010 \*  
 Venus -57874-08-20 04:33 J -19416824.49 -19416824.31 -19416824.11 0.0068 0.0036  
 Venus -57873-04-01 10:33 J -19416599.28 -19416599.06 -19416598.83 0.0068 0.0006  
 Venus -57873-11-12 16:04 J -19416373.96 -19416373.83 -19416373.65 0.0068 0.0049  
 Mercury -57800-02-19 00:42 J -19389977.47 -19389977.47 -19389977.44 0.0083 0.0083  
 Mercury -57800-05-18 02:37 J -19389889.46 -19389889.39 -19389889.32 0.0083 0.0072  
 Mercury -57800-08-14 04:04 J -19389801.41 -19389801.33 -19389801.23 0.0083 0.0063  
 Mercury -57800-11-10 05:45 J -19389713.36 -19389713.26 -19389713.14 0.0083 0.0053  
 Mercury -57799-02-06 07:11 J -19389625.31 -19389625.20 -19389625.06 0.0083 0.0044  
 Mercury -57799-05-05 09:06 J -19389537.25 -19389537.12 -19389536.99 0.0083 0.0034  
 Mercury -57799-08-01 10:33 J -19389449.19 -19389449.06 -19389448.92 0.0082 0.0024  
 Mercury -57799-10-28 12:13 J -19389361.13 -19389360.99 -19389360.85 0.0082 0.0015  
 Mercury -57798-01-24 13:40 J -19389273.07 -19389272.93 -19389272.78 0.0082 0.0006  
 Mercury -57798-04-22 15:21 J -19389185.01 -19389184.86 -19389184.72 0.0082 0.0004  
 Mercury -57798-07-19 16:47 J -19389096.94 -19389096.80 -19389096.66 0.0082 0.0013  
 Mercury -57798-10-15 18:13 J -19389008.87 -19389008.74 -19389008.60 0.0082 0.0022  
 Mercury -57797-01-11 19:40 J -19388920.81 -19388920.68 -19388920.54 0.0082 0.0031  
 Mercury -57797-04-08 21:21 J -19388832.74 -19388832.61 -19388832.49 0.0082 0.0040  
 Mercury -57797-07-05 22:33 J -19388744.67 -19388744.56 -19388744.44 0.0081 0.0049  
 Mercury -57797-10-01 23:59 J -19388656.59 -19388656.50 -19388656.39 0.0081 0.0058  
 Mercury -57797-12-29 01:25 J -19388568.51 -19388568.44 -19388568.35 0.0081 0.0066  
 Mercury -57796-03-27 02:37 J -19388480.42 -19388480.39 -19388480.32 0.0081 0.0075  
 Moon -57796-06-16 10:47 J -19388399.12 -19388399.05 -19388398.91 0.0081 0.0074  
 Earth -57796-06-16 13:54 J -19388399.02 -19388398.92 -19388398.77 0.0081 0.0071 \*  
 Mars -57794-07-12 19:11 J -19387642.77 -19387642.70 -19387642.53 0.0080 0.0074  
 Venus -57788-06-19 12:28 J -19385474.17 -19385473.98 -19385473.79 0.0076 0.0037  
 Venus -57787-01-30 20:23 J -19385248.84 -19385248.65 -19385248.43 0.0076 0.0021  
 Mercury -57644-01-21 07:40 J -19333027.19 -19333027.18 -19333027.12 0.0061 0.0060  
 Mercury -57644-04-19 09:06 J -19332939.18 -19332939.12 -19332939.04 0.0061 0.0055  
 Mercury -57644-07-16 09:49 J -19332851.16 -19332851.09 -19332850.97 0.0061 0.0051

Mercury -57644-10-12 11:01 J -19332763.13 -19332763.04 -19332762.91 0.0061 0.0047  
 Mercury -57643-01-08 12:28 J -19332675.10 -19332674.98 -19332674.85 0.0061 0.0042  
 Mercury -57643-04-06 13:25 J -19332587.07 -19332586.94 -19332586.79 0.0061 0.0037  
 Mercury -57643-07-03 14:37 J -19332499.03 -19332498.89 -19332498.74 0.0062 0.0033  
 Mercury -57643-09-29 15:49 J -19332410.99 -19332410.84 -19332410.68 0.0062 0.0028  
 Mercury -57643-12-26 16:47 J -19332322.95 -19332322.80 -19332322.63 0.0062 0.0024  
 Mercury -57642-03-24 17:59 J -19332234.91 -19332234.75 -19332234.57 0.0062 0.0019  
 Mercury -57642-06-20 19:11 J -19332146.86 -19332146.70 -19332146.52 0.0062 0.0014  
 Mercury -57642-09-16 20:23 J -19332058.82 -19332058.65 -19332058.47 0.0062 0.0009  
 Mercury -57642-12-13 21:35 J -19331970.77 -19331970.60 -19331970.42 0.0062 0.0005  
 Mercury -57641-03-10 22:47 J -19331882.72 -19331882.55 -19331882.37 0.0062 0.0001  
 Mercury -57641-06-06 23:59 J -19331794.67 -19331794.50 -19331794.32 0.0062 0.0005  
 Mercury -57641-09-03 00:57 J -19331706.62 -19331706.46 -19331706.28 0.0062 0.0011  
 Mercury -57641-11-30 02:09 J -19331618.57 -19331618.41 -19331618.23 0.0062 0.0015  
 Mercury -57640-02-26 03:35 J -19331530.52 -19331530.35 -19331530.18 0.0062 0.0020  
 Mercury -57640-05-25 04:47 J -19331442.46 -19331442.30 -19331442.14 0.0062 0.0025  
 Mercury -57640-08-21 05:59 J -19331354.40 -19331354.25 -19331354.09 0.0063 0.0030  
 Mercury -57640-11-17 07:11 J -19331266.34 -19331266.20 -19331266.05 0.0063 0.0035  
 Mercury -57639-02-13 08:23 J -19331178.28 -19331178.15 -19331178.01 0.0063 0.0040  
 Mercury -57639-05-12 09:35 J -19331090.22 -19331090.10 -19331089.97 0.0063 0.0045  
 Mercury -57639-08-08 10:47 J -19331002.15 -19331002.05 -19331001.94 0.0063 0.0050  
 Mercury -57639-11-04 12:13 J -19330914.07 -19330913.99 -19330913.91 0.0063 0.0055  
 Mercury -57638-01-31 12:57 J -19330825.98 -19330825.96 -19330825.89 0.0063 0.0061  
 Moon -57638-12-13 10:47 J -19330510.16 -19330510.05 -19330509.89 0.0063 0.0055  
 Earth -57638-12-13 12:13 J -19330510.13 -19330509.99 -19330509.84 0.0063 0.0052 \*  
 Earth -57637-12-13 23:45 J -19330143.75 -19330143.51 -19330143.27 0.0064 0.0025  
 Moon -57637-12-14 01:54 J -19330143.64 -19330143.42 -19330143.19 0.0064 0.0028 \*  
 Mars -57635-04-28 00:57 J -19329643.61 -19329643.46 -19329643.22 0.0064 0.0051  
 Venus -57626-07-23 16:33 J -19326270.00 -19326269.81 -19326269.59 0.0068 0.0028  
 Venus -57625-03-04 22:47 J -19326044.77 -19326044.55 -19326044.33 0.0068 0.0014

Venus -57625-10-16 04:04 J -19325819.42 -19325819.33 -19325819.17 0.0068 0.0058

Mercury -57553-12-19 10:18 J -19299457.07 -19299457.07 -19299457.05 0.0083 0.0083

Mercury -57552-03-17 11:59 J -19299369.06 -19299369.00 -19299368.93 0.0083 0.0073

Mercury -57552-06-13 13:40 J -19299281.02 -19299280.93 -19299280.83 0.0083 0.0063

Mercury -57552-09-09 15:06 J -19299192.97 -19299192.87 -19299192.75 0.0083 0.0054

Mercury -57552-12-06 17:01 J -19299104.91 -19299104.79 -19299104.67 0.0083 0.0044

Mercury -57551-03-04 18:28 J -19299016.85 -19299016.73 -19299016.59 0.0083 0.0035

Mercury -57551-05-31 20:09 J -19298928.80 -19298928.66 -19298928.52 0.0082 0.0025

Mercury -57551-08-27 21:49 J -19298840.73 -19298840.59 -19298840.45 0.0082 0.0016

Mercury -57551-11-23 23:16 J -19298752.67 -19298752.53 -19298752.38 0.0082 0.0006

Mercury -57550-02-20 00:57 J -19298664.61 -19298664.46 -19298664.32 0.0082 0.0004

Mercury -57550-05-19 02:23 J -19298576.54 -19298576.40 -19298576.26 0.0082 0.0012

Mercury -57550-08-15 03:49 J -19298488.48 -19298488.34 -19298488.20 0.0082 0.0021

Mercury -57550-11-11 05:16 J -19298400.41 -19298400.28 -19298400.14 0.0082 0.0030

Mercury -57549-02-07 06:42 J -19298312.34 -19298312.22 -19298312.09 0.0081 0.0039

Mercury -57549-05-05 08:23 J -19298224.27 -19298224.15 -19298224.04 0.0081 0.0048

Mercury -57549-08-01 09:35 J -19298136.19 -19298136.10 -19298135.99 0.0081 0.0057

Mercury -57549-10-28 11:01 J -19298048.11 -19298048.04 -19298047.95 0.0081 0.0065

Mercury -57548-01-24 12:13 J -19297960.03 -19297959.99 -19297959.92 0.0081 0.0074

Earth -57548-06-18 13:54 J -19297815.14 -19297814.92 -19297814.68 0.0081 0.0035

Moon -57548-06-18 17:16 J -19297815.01 -19297814.78 -19297814.55 0.0081 0.0039 \*

Venus -57540-05-23 01:54 J -19294919.62 -19294919.42 -19294919.20 0.0076 0.0024

Venus -57539-01-03 10:18 J -19294694.25 -19294694.07 -19294693.87 0.0076 0.0034

Mercury -57396-02-16 17:01 J -19242418.83 -19242418.79 -19242418.74 0.0061 0.0059

Mercury -57396-05-15 17:45 J -19242330.82 -19242330.76 -19242330.66 0.0061 0.0055

Mercury -57396-08-11 19:11 J -19242242.79 -19242242.70 -19242242.59 0.0061 0.0050

Mercury -57396-11-07 19:54 J -19242154.77 -19242154.67 -19242154.53 0.0061 0.0046

Mercury -57395-02-03 21:06 J -19242066.73 -19242066.62 -19242066.47 0.0061 0.0041

Mercury -57395-05-02 22:33 J -19241978.70 -19241978.56 -19241978.42 0.0062 0.0036

Mercury -57395-07-29 23:16 J -19241890.66 -19241890.53 -19241890.36 0.0062 0.0032



Mercury -57395-10-26 00:42 J -19241802.62 -19241802.47 -19241802.31 0.0062 0.0027

Mercury -57394-01-22 01:54 J -19241714.58 -19241714.42 -19241714.25 0.0062 0.0022

Mercury -57394-04-20 02:52 J -19241626.54 -19241626.38 -19241626.20 0.0062 0.0018

Mercury -57394-07-17 04:04 J -19241538.49 -19241538.33 -19241538.15 0.0062 0.0013

Mercury -57394-10-13 05:16 J -19241450.45 -19241450.28 -19241450.10 0.0062 0.0008

Mercury -57393-01-09 06:28 J -19241362.40 -19241362.23 -19241362.05 0.0062 0.0003

Mercury -57393-04-06 07:40 J -19241274.35 -19241274.18 -19241274.00 0.0062 0.0002

Mercury -57393-07-03 08:52 J -19241186.30 -19241186.13 -19241185.95 0.0062 0.0006

Mercury -57393-09-29 10:04 J -19241098.25 -19241098.08 -19241097.91 0.0062 0.0011

Mercury -57393-12-26 11:01 J -19241010.20 -19241010.04 -19241009.86 0.0062 0.0017

Mercury -57392-03-24 12:13 J -19240922.15 -19240921.99 -19240921.81 0.0062 0.0021

Mercury -57392-06-20 13:25 J -19240834.09 -19240833.94 -19240833.77 0.0062 0.0026

Mercury -57392-09-16 14:23 J -19240746.03 -19240745.90 -19240745.73 0.0063 0.0032

Mercury -57392-12-13 15:35 J -19240657.97 -19240657.85 -19240657.68 0.0063 0.0037

Mercury -57391-03-11 16:47 J -19240569.91 -19240569.80 -19240569.64 0.0063 0.0042

Mercury -57391-06-07 17:59 J -19240481.84 -19240481.75 -19240481.61 0.0063 0.0047

Mercury -57391-09-03 19:25 J -19240393.77 -19240393.69 -19240393.57 0.0063 0.0052

Mercury -57391-11-30 20:37 J -19240305.69 -19240305.64 -19240305.54 0.0063 0.0057

Mercury -57390-02-26 21:49 J -19240217.60 -19240217.59 -19240217.54 0.0063 0.0062

Earth -57390-12-15 05:01 J -19239926.47 -19239926.29 -19239926.08 0.0063 0.0043

Moon -57390-12-15 05:59 J -19239926.41 -19239926.25 -19239926.05 0.0063 0.0044 \*

Moon -57389-12-15 13:11 J -19239560.15 -19239559.95 -19239559.71 0.0064 0.0034

Earth -57389-12-15 16:47 J -19239560.01 -19239559.80 -19239559.58 0.0064 0.0034 \*

Mars -57387-08-06 08:37 J -19238961.44 -19238961.14 -19238960.82 0.0064 0.0013

Venus -57379-11-12 21:06 J -19235940.63 -19235940.62 -19235940.56 0.0068 0.0067

Venus -57378-06-26 03:21 J -19235715.56 -19235715.36 -19235715.15 0.0068 0.0025

Venus -57377-02-06 09:06 J -19235490.33 -19235490.12 -19235489.89 0.0068 0.0017

Venus -57377-09-18 15:06 J -19235264.97 -19235264.87 -19235264.75 0.0068 0.0060

Mercury -57304-01-14 20:09 J -19208848.69 -19208848.66 -19208848.61 0.0083 0.0080

Mercury -57304-04-12 22:04 J -19208760.66 -19208760.58 -19208760.50 0.0083 0.0069

Mercury -57304-07-09 23:30 J -19208672.61 -19208672.52 -19208672.41 0.0083 0.0060  
 Mercury -57304-10-06 01:11 J -19208584.56 -19208584.45 -19208584.33 0.0083 0.0050  
 Mercury -57303-01-02 02:52 J -19208496.50 -19208496.38 -19208496.25 0.0083 0.0040  
 Mercury -57303-03-31 04:18 J -19208408.45 -19208408.32 -19208408.18 0.0082 0.0031  
 Mercury -57303-06-27 05:59 J -19208320.39 -19208320.25 -19208320.11 0.0082 0.0022  
 Mercury -57303-09-23 07:40 J -19208232.32 -19208232.18 -19208232.04 0.0082 0.0012  
 Mercury -57303-12-20 09:06 J -19208144.26 -19208144.12 -19208143.97 0.0082 0.0004  
 Mercury -57302-03-18 10:47 J -19208056.20 -19208056.05 -19208055.91 0.0082 0.0006  
 Mercury -57302-06-14 12:13 J -19207968.13 -19207967.99 -19207967.85 0.0082 0.0015  
 Mercury -57302-09-10 13:40 J -19207880.06 -19207879.93 -19207879.79 0.0082 0.0024  
 Mercury -57302-12-07 15:06 J -19207791.99 -19207791.87 -19207791.73 0.0081 0.0033  
 Mercury -57301-03-04 16:47 J -19207703.92 -19207703.80 -19207703.68 0.0081 0.0042  
 Mercury -57301-05-31 18:13 J -19207615.85 -19207615.74 -19207615.63 0.0081 0.0051  
 Mercury -57301-08-27 19:25 J -19207527.78 -19207527.69 -19207527.58 0.0081 0.0059  
 Mercury -57301-11-23 20:52 J -19207439.70 -19207439.63 -19207439.54 0.0081 0.0068  
 Mercury -57300-02-19 22:33 J -19207351.60 -19207351.56 -19207351.52 0.0081 0.0076  
 Moon -57300-06-20 05:30 J -19207231.50 -19207231.27 -19207231.02 0.0081 0.0022  
 Earth -57300-06-20 07:25 J -19207231.43 -19207231.19 -19207230.93 0.0081 0.0022 \*  
 Venus -57292-04-25 12:13 J -19204365.19 -19204364.99 -19204364.78 0.0076 0.0023  
 Venus -57292-12-06 20:23 J -19204139.83 -19204139.65 -19204139.45 0.0076 0.0035  
 Mercury -57148-03-15 00:42 J -19151810.48 -19151810.47 -19151810.42 0.0061 0.0060  
 Mercury -57148-06-11 01:54 J -19151722.48 -19151722.42 -19151722.34 0.0061 0.0056  
 Mercury -57148-09-07 02:52 J -19151634.46 -19151634.38 -19151634.27 0.0061 0.0051  
 Mercury -57148-12-04 04:04 J -19151546.43 -19151546.33 -19151546.21 0.0061 0.0047  
 Mercury -57147-03-02 05:01 J -19151458.40 -19151458.29 -19151458.15 0.0061 0.0042  
 Mercury -57147-05-29 06:13 J -19151370.36 -19151370.24 -19151370.09 0.0062 0.0038  
 Mercury -57147-08-25 07:25 J -19151282.33 -19151282.19 -19151282.04 0.0062 0.0033  
 Mercury -57147-11-21 08:23 J -19151194.29 -19151194.15 -19151193.98 0.0062 0.0029  
 Mercury -57146-02-17 09:35 J -19151106.25 -19151106.10 -19151105.93 0.0062 0.0024  
 Mercury -57146-05-16 10:47 J -19151018.21 -19151018.05 -19151017.87 0.0062 0.0019

Mercury -57146-08-12 11:45 J -19150930.16 -19150930.01 -19150929.82 0.0062 0.0015

Mercury -57146-11-08 13:11 J -19150842.12 -19150841.95 -19150841.77 0.0062 0.0010

Mercury -57145-02-04 14:23 J -19150754.07 -19150753.90 -19150753.72 0.0062 0.0005

Mercury -57145-05-02 15:35 J -19150666.02 -19150665.85 -19150665.67 0.0062 0.0000

Mercury -57145-07-29 16:47 J -19150577.98 -19150577.80 -19150577.62 0.0062 0.0005

Mercury -57145-10-25 17:59 J -19150489.92 -19150489.75 -19150489.58 0.0062 0.0010

Mercury -57144-01-21 18:57 J -19150401.87 -19150401.71 -19150401.53 0.0062 0.0015

Mercury -57144-04-19 20:09 J -19150313.82 -19150313.66 -19150313.48 0.0062 0.0020

Mercury -57144-07-16 21:21 J -19150225.76 -19150225.61 -19150225.44 0.0062 0.0025

Mercury -57144-10-12 22:33 J -19150137.71 -19150137.56 -19150137.39 0.0063 0.0030

Mercury -57143-01-08 23:30 J -19150049.65 -19150049.52 -19150049.35 0.0063 0.0035

Mercury -57143-04-07 00:42 J -19149961.58 -19149961.47 -19149961.31 0.0063 0.0040

Mercury -57143-07-04 02:09 J -19149873.52 -19149873.41 -19149873.27 0.0063 0.0045

Mercury -57143-09-30 03:21 J -19149785.45 -19149785.36 -19149785.24 0.0063 0.0050

Mercury -57143-12-27 04:33 J -19149697.38 -19149697.31 -19149697.21 0.0063 0.0055

Mercury -57142-03-25 05:45 J -19149609.29 -19149609.26 -19149609.19 0.0063 0.0060

Moon -57142-12-16 15:35 J -19149343.02 -19149342.85 -19149342.62 0.0063 0.0042

Earth -57142-12-16 18:28 J -19149342.90 -19149342.73 -19149342.53 0.0063 0.0045 \*

Earth -57141-12-17 05:45 J -19148976.46 -19148976.26 -19148976.01 0.0064 0.0033

Moon -57141-12-17 09:06 J -19148976.33 -19148976.12 -19148975.87 0.0064 0.0030 \*

Mars -57139-11-14 08:23 J -19148279.29 -19148279.15 -19148279.00 0.0064 0.0057

Venus -57130-05-29 11:01 J -19145161.24 -19145161.04 -19145160.84 0.0068 0.0031

Venus -57129-01-09 16:47 J -19144936.02 -19144935.80 -19144935.57 0.0068 0.0011

Venus -57129-08-21 22:33 J -19144710.69 -19144710.56 -19144710.41 0.0068 0.0054

Mercury -57056-02-10 05:16 J -19118240.31 -19118240.28 -19118240.23 0.0083 0.0079

Mercury -57056-05-09 06:57 J -19118152.28 -19118152.21 -19118152.12 0.0083 0.0069

Mercury -57056-08-05 08:23 J -19118064.23 -19118064.15 -19118064.03 0.0083 0.0060

Mercury -57056-11-01 10:18 J -19117976.18 -19117976.07 -19117975.95 0.0083 0.0050

Mercury -57055-01-28 11:45 J -19117888.13 -19117888.01 -19117887.88 0.0083 0.0040

Mercury -57055-04-26 13:25 J -19117800.07 -19117799.94 -19117799.80 0.0082 0.0031

Mercury -57055-07-23 15:06 J -19117712.01 -19117711.87 -19117711.73 0.0082 0.0021

Mercury -57055-10-19 16:33 J -19117623.95 -19117623.81 -19117623.66 0.0082 0.0012

Mercury -57054-01-15 18:13 J -19117535.89 -19117535.74 -19117535.60 0.0082 0.0003

Mercury -57054-04-13 19:40 J -19117447.82 -19117447.68 -19117447.53 0.0082 0.0006

Mercury -57054-07-10 21:06 J -19117359.75 -19117359.62 -19117359.47 0.0082 0.0016

Mercury -57054-10-06 22:33 J -19117271.69 -19117271.56 -19117271.41 0.0082 0.0025

Mercury -57053-01-02 23:59 J -19117183.62 -19117183.50 -19117183.36 0.0081 0.0034

Mercury -57053-03-31 01:25 J -19117095.55 -19117095.44 -19117095.30 0.0081 0.0042

Mercury -57053-06-27 03:06 J -19117007.48 -19117007.37 -19117007.25 0.0081 0.0051

Mercury -57053-09-23 04:33 J -19116919.40 -19116919.31 -19116919.21 0.0081 0.0059

Mercury -57053-12-20 05:45 J -19116831.32 -19116831.26 -19116831.17 0.0081 0.0068

Mercury -57052-03-18 07:25 J -19116743.23 -19116743.19 -19116743.14 0.0081 0.0076

Earth -57052-06-21 20:37 J -19116647.88 -19116647.64 -19116647.38 0.0081 0.0021

Moon -57052-06-21 22:33 J -19116647.81 -19116647.56 -19116647.29 0.0081 0.0017 \*

Venus -57044-03-28 20:09 J -19113810.85 -19113810.66 -19113810.45 0.0076 0.0029

Venus -57044-11-09 04:33 J -19113585.50 -19113585.31 -19113585.10 0.0076 0.0029

# 57TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 57th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury -56900-07-07 08:52 J -19061114.16 -19061114.13 -19061114.07 0.0061 0.0059

Mercury -56900-10-03 10:04 J -19061026.14 -19061026.08 -19061025.99 0.0061 0.0055

Mercury -56900-12-30 11:01 J -19060938.12 -19060938.04 -19060937.93 0.0061 0.0050

Mercury -56899-03-28 12:13 J -19060850.09 -19060849.99 -19060849.86 0.0061 0.0046

Mercury -56899-06-24 13:11 J -19060762.06 -19060761.95 -19060761.81 0.0061 0.0041

Mercury -56899-09-20 14:23 J -19060674.03 -19060673.90 -19060673.75 0.0062 0.0037

Mercury -56899-12-17 15:35 J -19060585.99 -19060585.85 -19060585.69 0.0062 0.0032

Mercury -56898-03-15 16:33 J -19060497.95 -19060497.81 -19060497.64 0.0062 0.0028

Mercury -56898-06-11 17:45 J -19060409.91 -19060409.76 -19060409.59 0.0062 0.0023

Mercury -56898-09-07 18:57 J -19060321.87 -19060321.71 -19060321.54 0.0062 0.0018

Mercury -56898-12-04 19:54 J -19060233.83 -19060233.67 -19060233.48 0.0062 0.0014

Mercury -56897-03-01 21:21 J -19060145.78 -19060145.61 -19060145.43 0.0062 0.0009

Mercury -56897-05-28 22:33 J -19060057.74 -19060057.56 -19060057.39 0.0062 0.0004

Mercury -56897-08-24 23:45 J -19059969.69 -19059969.51 -19059969.34 0.0062 0.0001

Mercury -56897-11-21 00:42 J -19059881.64 -19059881.47 -19059881.29 0.0062 0.0006

Mercury -56896-02-17 02:09 J -19059793.59 -19059793.41 -19059793.24 0.0062 0.0011

Mercury -56896-05-16 03:06 J -19059705.53 -19059705.37 -19059705.19 0.0062 0.0016

Mercury -56896-08-12 04:18 J -19059617.48 -19059617.32 -19059617.15 0.0062 0.0021

Mercury -56896-11-08 05:16 J -19059529.43 -19059529.28 -19059529.10 0.0063 0.0026

Mercury -56895-02-04 06:28 J -19059441.37 -19059441.23 -19059441.06 0.0063 0.0031

Mercury -56895-05-03 07:40 J -19059353.31 -19059353.18 -19059353.02 0.0063 0.0036

Mercury -56895-07-30 08:52 J -19059265.25 -19059265.13 -19059264.98 0.0063 0.0041

Mercury -56895-10-26 10:04 J -19059177.18 -19059177.08 -19059176.94 0.0063 0.0046

Mercury -56894-01-22 11:16 J -19059089.11 -19059089.03 -19059088.90 0.0063 0.0051

Mercury -56894-04-20 12:28 J -19059001.03 -19059000.98 -19059000.88 0.0063 0.0056

Mercury -56894-07-17 13:54 J -19058912.94 -19058912.92 -19058912.86 0.0063 0.0061

Earth -56894-12-18 04:33 J -19058759.44 -19058759.31 -19058759.18 0.0063 0.0055

Moon -56894-12-18 06:28 J -19058759.33 -19058759.23 -19058759.06 0.0063 0.0054 \*

Moon -56893-12-18 12:13 J -19058393.23 -19058392.99 -19058392.74 0.0064 0.0020

Earth -56893-12-18 15:35 J -19058393.07 -19058392.85 -19058392.58 0.0064 0.0022 \*

Venus -56882-05-01 15:21 J -19054607.00 -19054606.86 -19054606.67 0.0068 0.0046

Venus -56882-12-12 21:35 J -19054381.82 -19054381.60 -19054381.37 0.0068 0.0004

Venus -56881-07-25 03:06 J -19054156.53 -19054156.37 -19054156.16 0.0068 0.0039

Mercury -56808-06-04 14:09 J -19027543.95 -19027543.91 -19027543.84 0.0083 0.0076

Mercury -56808-08-31 16:04 J -19027455.91 -19027455.83 -19027455.74 0.0083 0.0066

Mercury -56808-11-27 17:30 J -19027367.86 -19027367.77 -19027367.65 0.0083 0.0057

Mercury -56807-02-23 19:25 J -19027279.81 -19027279.69 -19027279.57 0.0083 0.0047

Mercury -56807-05-22 20:52 J -19027191.76 -19027191.63 -19027191.50 0.0082 0.0037

Mercury -56807-08-18 22:18 J -19027103.70 -19027103.57 -19027103.43 0.0082 0.0028

Mercury -56807-11-14 23:59 J -19027015.64 -19027015.50 -19027015.35 0.0082 0.0019

Mercury -56806-02-11 01:40 J -19026927.57 -19026927.43 -19026927.29 0.0082 0.0009

Mercury -56806-05-10 03:06 J -19026839.51 -19026839.37 -19026839.22 0.0082 0.0002

Mercury -56806-08-06 04:47 J -19026751.45 -19026751.30 -19026751.16 0.0082 0.0009

Mercury -56806-11-02 06:13 J -19026663.38 -19026663.24 -19026663.10 0.0082 0.0018

Mercury -56805-01-29 07:40 J -19026575.31 -19026575.18 -19026575.04 0.0081 0.0027

Mercury -56805-04-26 09:06 J -19026487.24 -19026487.12 -19026486.99 0.0081 0.0035

Mercury -56805-07-23 10:33 J -19026399.17 -19026399.06 -19026398.93 0.0081 0.0044

Mercury -56805-10-19 11:45 J -19026311.10 -19026311.01 -19026310.89 0.0081 0.0054

Mercury -56804-01-15 13:25 J -19026223.02 -19026222.94 -19026222.84 0.0081 0.0061

Mercury -56804-04-13 14:52 J -19026134.94 -19026134.88 -19026134.80 0.0081 0.0070

Earth -56804-06-23 01:54 J -19026064.62 -19026064.42 -19026064.20 0.0081 0.0048

Moon -56804-06-23 01:40 J -19026064.61 -19026064.43 -19026064.20 0.0081 0.0047 \*

Mercury -56804-07-10 16:33 J -19026046.84 -19026046.81 -19026046.78 0.0081 0.0078

Mars -56803-09-24 02:09 J -19025606.64 -19025606.41 -19025606.15 0.0080 0.0050

Venus -56796-02-28 23:59 J -19023256.65 -19023256.50 -19023256.34 0.0076 0.0052

Venus -56796-10-12 08:23 J -19023031.36 -19023031.15 -19023030.93 0.0076 0.0007

Venus -56795-05-25 16:18 J -19022805.91 -19022805.82 -19022805.68 0.0076 0.0064

Mercury -56652-10-29 16:04 J -18970417.84 -18970417.83 -18970417.80 0.0061 0.0061

Mercury -56651-01-25 17:01 J -18970329.84 -18970329.79 -18970329.71 0.0061 0.0056

Mercury -56651-04-23 18:28 J -18970241.82 -18970241.73 -18970241.64 0.0061 0.0052

Mercury -56651-07-20 19:11 J -18970153.79 -18970153.70 -18970153.58 0.0061 0.0048

Mercury -56651-10-16 20:23 J -18970065.76 -18970065.65 -18970065.52 0.0061 0.0043

Mercury -56650-01-12 21:21 J -18969977.73 -18969977.61 -18969977.46 0.0062 0.0039

Mercury -56650-04-10 22:33 J -18969889.69 -18969889.56 -18969889.40 0.0062 0.0034

Mercury -56650-07-07 23:59 J -18969801.66 -18969801.50 -18969801.35 0.0062 0.0029

Mercury -56650-10-04 00:42 J -18969713.62 -18969713.47 -18969713.30 0.0062 0.0025

Mercury -56650-12-31 01:54 J -18969625.57 -18969625.42 -18969625.24 0.0062 0.0020

Mercury -56649-03-28 03:06 J -18969537.53 -18969537.37 -18969537.19 0.0062 0.0015

Mercury -56649-06-24 04:18 J -18969449.49 -18969449.32 -18969449.14 0.0062 0.0011

Mercury -56649-09-20 05:30 J -18969361.44 -18969361.27 -18969361.09 0.0062 0.0006

Mercury -56649-12-17 06:42 J -18969273.39 -18969273.22 -18969273.04 0.0062 0.0001

Mercury -56648-03-15 07:54 J -18969185.35 -18969185.17 -18969185.00 0.0062 0.0004

Mercury -56648-06-11 09:06 J -18969097.30 -18969097.12 -18969096.95 0.0062 0.0009

Mercury -56648-09-07 10:18 J -18969009.24 -18969009.07 -18969008.90 0.0062 0.0014

Mercury -56648-12-04 11:16 J -18968921.19 -18968921.03 -18968920.85 0.0062 0.0019

Mercury -56647-03-02 12:28 J -18968833.14 -18968832.98 -18968832.81 0.0063 0.0024

Mercury -56647-05-29 13:25 J -18968745.08 -18968744.94 -18968744.77 0.0063 0.0029

Mercury -56647-08-25 14:37 J -18968657.02 -18968656.89 -18968656.72 0.0063 0.0034

Mercury -56647-11-21 15:49 J -18968568.96 -18968568.84 -18968568.68 0.0063 0.0039

Mercury -56646-02-17 17:01 J -18968480.89 -18968480.79 -18968480.64 0.0063 0.0044

Mercury -56646-05-16 18:13 J -18968392.83 -18968392.74 -18968392.61 0.0063 0.0049

Mercury -56646-08-12 19:25 J -18968304.75 -18968304.69 -18968304.57 0.0063 0.0054

Mercury -56646-11-08 20:52 J -18968216.67 -18968216.63 -18968216.55 0.0063 0.0059

Earth -56645-12-19 21:49 J -18967809.85 -18967809.59 -18967809.33 0.0063 0.0001

Moon -56645-12-20 00:57 J -18967809.72 -18967809.46 -18967809.19 0.0063 0.0003 \*

Venus -56634-11-14 23:45 J -18963827.71 -18963827.51 -18963827.30 0.0068 0.0027

Venus -56633-06-27 05:45 J -18963602.48 -18963602.26 -18963602.04 0.0068 0.0015

Venus -56632-02-07 11:16 J -18963377.13 -18963377.03 -18963376.90 0.0068 0.0058

Mercury -56560-09-26 22:18 J -18936847.61 -18936847.57 -18936847.51 0.0083 0.0077

Mercury -56560-12-23 23:59 J -18936759.58 -18936759.50 -18936759.41 0.0083 0.0067

Mercury -56559-03-22 01:25 J -18936671.53 -18936671.44 -18936671.32 0.0083 0.0058

Mercury -56559-06-18 03:21 J -18936583.47 -18936583.36 -18936583.24 0.0083 0.0048

Mercury -56559-09-14 04:47 J -18936495.42 -18936495.30 -18936495.16 0.0082 0.0039

Mercury -56559-12-11 06:28 J -18936407.36 -18936407.23 -18936407.09 0.0082 0.0029

Mercury -56558-03-09 08:09 J -18936319.30 -18936319.16 -18936319.02 0.0082 0.0020

Mercury -56558-06-05 09:35 J -18936231.24 -18936231.10 -18936230.95 0.0082 0.0011

Mercury -56558-09-01 11:16 J -18936143.17 -18936143.03 -18936142.89 0.0082 0.0001

Mercury -56558-11-28 12:42 J -18936055.11 -18936054.97 -18936054.82 0.0082 0.0008

Mercury -56557-02-24 14:23 J -18935967.04 -18935966.90 -18935966.76 0.0082 0.0017

Mercury -56557-05-22 15:49 J -18935878.98 -18935878.84 -18935878.70 0.0081 0.0026

Mercury -56557-08-18 17:16 J -18935790.91 -18935790.78 -18935790.65 0.0081 0.0034

Mercury -56557-11-14 18:42 J -18935702.84 -18935702.72 -18935702.60 0.0081 0.0043

Mercury -56556-02-10 19:54 J -18935614.77 -18935614.67 -18935614.55 0.0081 0.0052

Mercury -56556-05-09 21:35 J -18935526.69 -18935526.60 -18935526.50 0.0081 0.0060

Mercury -56556-08-05 22:47 J -18935438.61 -18935438.55 -18935438.46 0.0081 0.0069

Mercury -56556-11-02 00:13 J -18935350.51 -18935350.49 -18935350.44 0.0081 0.0078

Earth -56555-06-26 07:25 J -18935114.29 -18935114.19 -18935114.02 0.0080 0.0069

Moon -56555-06-26 10:04 J -18935114.17 -18935114.08 -18935113.95 0.0080 0.0072 \*

Mars -56554-01-01 09:35 J -18934925.36 -18934925.10 -18934924.79 0.0080 0.0036

Venus -56548-09-14 09:35 J -18932477.29 -18932477.10 -18932476.88 0.0076 0.0024

Venus -56547-04-27 18:13 J -18932251.93 -18932251.74 -18932251.54 0.0076 0.0034

Mercury -56403-05-19 23:01 J -18879633.55 -18879633.54 -18879633.48 0.0061 0.0061

Mercury -56403-08-16 00:28 J -18879545.54 -18879545.48 -18879545.40 0.0061 0.0056

Mercury -56403-11-12 01:11 J -18879457.52 -18879457.45 -18879457.33 0.0061 0.0052

Mercury -56402-02-08 02:37 J -18879369.49 -18879369.39 -18879369.27 0.0061 0.0047

Mercury -56402-05-07 03:21 J -18879281.46 -18879281.36 -18879281.21 0.0061 0.0043

Mercury -56402-08-03 04:47 J -18879193.43 -18879193.30 -18879193.15 0.0062 0.0038

Mercury -56402-10-30 05:59 J -18879105.39 -18879105.25 -18879105.10 0.0062 0.0033

Mercury -56401-01-26 06:57 J -18879017.35 -18879017.21 -18879017.04 0.0062 0.0029

Mercury -56401-04-23 08:09 J -18878929.31 -18878929.16 -18878928.99 0.0062 0.0024

Mercury -56401-07-20 09:21 J -18878841.27 -18878841.11 -18878840.94 0.0062 0.0019

Mercury -56401-10-16 10:18 J -18878753.23 -18878753.07 -18878752.89 0.0062 0.0015



Mercury -56400-01-12 11:30 J -18878665.18 -18878665.02 -18878664.84 0.0062 0.0010

Mercury -56400-04-10 12:57 J -18878577.14 -18878576.96 -18878576.79 0.0062 0.0005

Mercury -56400-07-07 13:54 J -18878489.09 -18878488.92 -18878488.74 0.0062 0.0002

Mercury -56400-10-03 15:06 J -18878401.04 -18878400.87 -18878400.69 0.0062 0.0005

Mercury -56400-12-30 16:18 J -18878312.99 -18878312.82 -18878312.64 0.0062 0.0009

Mercury -56399-03-28 17:16 J -18878224.94 -18878224.78 -18878224.60 0.0062 0.0015

Mercury -56399-06-24 18:28 J -18878136.89 -18878136.73 -18878136.55 0.0062 0.0019

Mercury -56399-09-20 19:40 J -18878048.83 -18878048.68 -18878048.51 0.0063 0.0024

Mercury -56399-12-17 21:06 J -18877960.78 -18877960.62 -18877960.46 0.0063 0.0029

Mercury -56398-03-15 22:18 J -18877872.72 -18877872.57 -18877872.42 0.0063 0.0034

Mercury -56398-06-11 23:30 J -18877784.65 -18877784.52 -18877784.38 0.0063 0.0039

Mercury -56398-09-08 00:42 J -18877696.59 -18877696.47 -18877696.34 0.0063 0.0044

Mercury -56398-12-05 01:54 J -18877608.52 -18877608.42 -18877608.31 0.0063 0.0049

Mercury -56397-03-02 03:06 J -18877520.45 -18877520.37 -18877520.28 0.0063 0.0054

Mercury -56397-05-29 04:33 J -18877432.37 -18877432.31 -18877432.25 0.0063 0.0060

Moon -56397-12-20 20:37 J -18877226.85 -18877226.64 -18877226.39 0.0063 0.0028

Earth -56397-12-20 23:45 J -18877226.72 -18877226.51 -18877226.27 0.0063 0.0031 \*

Earth -56396-12-22 11:01 J -18876860.19 -18876860.04 -18876859.84 0.0064 0.0046

Moon -56396-12-22 12:28 J -18876860.16 -18876859.98 -18876859.77 0.0064 0.0044 \*

Venus -56386-10-17 22:47 J -18873273.64 -18873273.55 -18873273.41 0.0067 0.0059

Venus -56385-05-30 04:47 J -18873048.50 -18873048.30 -18873048.07 0.0068 0.0017

Venus -56384-01-10 10:33 J -18872823.25 -18872823.06 -18872822.84 0.0068 0.0026

Mercury -56311-04-17 06:28 J -18846063.29 -18846063.23 -18846063.17 0.0083 0.0075

Mercury -56311-07-14 07:40 J -18845975.25 -18845975.18 -18845975.08 0.0083 0.0066

Mercury -56311-10-10 09:35 J -18845887.20 -18845887.10 -18845886.99 0.0083 0.0056

Mercury -56310-01-06 11:01 J -18845799.15 -18845799.04 -18845798.91 0.0082 0.0047

Mercury -56310-04-04 12:42 J -18845711.09 -18845710.97 -18845710.83 0.0082 0.0037

Mercury -56310-07-01 14:09 J -18845623.03 -18845622.91 -18845622.76 0.0082 0.0029

Mercury -56310-09-27 16:04 J -18845534.97 -18845534.83 -18845534.69 0.0082 0.0018

Mercury -56310-12-24 17:30 J -18845446.91 -18845446.77 -18845446.62 0.0082 0.0009

Mercury -56309-03-21 19:11 J -18845358.85 -18845358.70 -18845358.56 0.0082 0.0001  
 Mercury -56309-06-17 20:37 J -18845270.78 -18845270.64 -18845270.49 0.0082 0.0009  
 Mercury -56309-09-13 22:04 J -18845182.72 -18845182.58 -18845182.43 0.0082 0.0018  
 Mercury -56309-12-10 23:45 J -18845094.65 -18845094.51 -18845094.38 0.0081 0.0027  
 Mercury -56308-03-09 01:11 J -18845006.58 -18845006.45 -18845006.32 0.0081 0.0035  
 Mercury -56308-06-05 02:23 J -18844918.51 -18844918.40 -18844918.27 0.0081 0.0045  
 Mercury -56308-09-01 03:49 J -18844830.44 -18844830.34 -18844830.22 0.0081 0.0053  
 Mercury -56308-11-28 05:30 J -18844742.36 -18844742.27 -18844742.18 0.0081 0.0061  
 Mercury -56307-02-24 06:42 J -18844654.28 -18844654.22 -18844654.14 0.0081 0.0070  
 Mercury -56307-05-23 08:23 J -18844566.18 -18844566.15 -18844566.12 0.0081 0.0078  
 Moon -56307-06-26 21:06 J -18844531.88 -18844531.62 -18844531.36 0.0081 0.0001  
 Earth -56307-06-27 00:28 J -18844531.74 -18844531.48 -18844531.22 0.0081 0.0003 \*  
 Mars -56306-04-10 01:40 J -18844244.56 -18844244.43 -18844244.27 0.0080 0.0071  
 Venus -56300-08-17 05:59 J -18841923.28 -18841923.25 -18841923.16 0.0077 0.0074  
 Venus -56299-03-30 15:06 J -18841698.08 -18841697.87 -18841697.65 0.0076 0.0014  
 Venus -56299-11-10 23:30 J -18841472.69 -18841472.52 -18841472.34 0.0076 0.0044  
 Mercury -56155-12-08 06:13 J -18788849.26 -18788849.24 -18788849.21 0.0061 0.0061  
 Mercury -56154-03-06 06:57 J -18788761.26 -18788761.21 -18788761.12 0.0061 0.0057  
 Mercury -56154-06-02 08:23 J -18788673.24 -18788673.15 -18788673.06 0.0061 0.0052  
 Mercury -56154-08-29 09:06 J -18788585.21 -18788585.12 -18788584.99 0.0061 0.0048  
 Mercury -56154-11-25 10:33 J -18788497.18 -18788497.06 -18788496.93 0.0062 0.0043  
 Mercury -56153-02-21 11:16 J -18788409.15 -18788409.03 -18788408.88 0.0062 0.0039  
 Mercury -56153-05-19 12:42 J -18788321.11 -18788320.97 -18788320.82 0.0062 0.0034  
 Mercury -56153-08-15 13:25 J -18788233.07 -18788232.94 -18788232.77 0.0062 0.0030  
 Mercury -56153-11-11 14:52 J -18788145.03 -18788144.88 -18788144.71 0.0062 0.0025  
 Mercury -56152-02-07 16:04 J -18788056.99 -18788056.83 -18788056.66 0.0062 0.0020  
 Mercury -56152-05-06 17:16 J -18787968.95 -18787968.78 -18787968.61 0.0062 0.0015  
 Mercury -56152-08-02 18:13 J -18787880.91 -18787880.74 -18787880.56 0.0062 0.0011  
 Mercury -56152-10-29 19:25 J -18787792.86 -18787792.69 -18787792.51 0.0062 0.0006  
 Mercury -56151-01-25 20:37 J -18787704.81 -18787704.64 -18787704.46 0.0062 0.0001

Mercury -56151-04-23 21:49 J -18787616.76 -18787616.59 -18787616.42 0.0062 0.0004

Mercury -56151-07-20 23:01 J -18787528.72 -18787528.54 -18787528.37 0.0062 0.0008

Mercury -56151-10-16 23:59 J -18787440.66 -18787440.50 -18787440.32 0.0062 0.0014

Mercury -56150-01-13 01:11 J -18787352.61 -18787352.45 -18787352.28 0.0062 0.0018

Mercury -56150-04-11 02:09 J -18787264.56 -18787264.41 -18787264.23 0.0063 0.0024

Mercury -56150-07-08 03:49 J -18787176.50 -18787176.34 -18787176.19 0.0063 0.0028

Mercury -56150-10-04 04:47 J -18787088.44 -18787088.30 -18787088.14 0.0063 0.0033

Mercury -56150-12-31 05:59 J -18787000.38 -18787000.25 -18787000.10 0.0063 0.0038

Mercury -56149-03-28 07:11 J -18786912.32 -18786912.20 -18786912.06 0.0063 0.0043

Mercury -56149-06-24 08:23 J -18786824.25 -18786824.15 -18786824.03 0.0063 0.0048

Mercury -56149-09-20 09:35 J -18786736.18 -18786736.10 -18786736.00 0.0063 0.0053

Mercury -56149-12-17 11:01 J -18786648.10 -18786648.04 -18786647.97 0.0063 0.0058

Earth -56148-12-23 11:16 J -18786277.27 -18786277.03 -18786276.76 0.0063 0.0010

Moon -56148-12-23 11:45 J -18786277.25 -18786277.01 -18786276.76 0.0063 0.0012 \*

Venus -56137-05-02 02:52 J -18782494.50 -18782494.38 -18782494.22 0.0067 0.0053

Venus -56137-12-13 08:52 J -18782269.34 -18782269.13 -18782268.90 0.0068 0.0011

Venus -56136-07-26 14:23 J -18782044.08 -18782043.90 -18782043.68 0.0068 0.0033

Mercury -56063-11-05 13:40 J -18755278.97 -18755278.93 -18755278.86 0.0083 0.0076

Mercury -56062-02-01 15:21 J -18755190.93 -18755190.86 -18755190.76 0.0083 0.0066

Mercury -56062-04-30 17:16 J -18755102.88 -18755102.78 -18755102.67 0.0083 0.0056

Mercury -56062-07-27 18:42 J -18755014.83 -18755014.72 -18755014.59 0.0082 0.0047

Mercury -56062-10-23 20:23 J -18754926.77 -18754926.65 -18754926.51 0.0082 0.0037

Mercury -56061-01-19 21:49 J -18754838.71 -18754838.59 -18754838.44 0.0082 0.0029

Mercury -56061-04-16 23:30 J -18754750.65 -18754750.52 -18754750.37 0.0082 0.0019

Mercury -56061-07-14 01:11 J -18754662.59 -18754662.45 -18754662.30 0.0082 0.0009

Mercury -56061-10-10 02:52 J -18754574.53 -18754574.38 -18754574.24 0.0082 0.0002

Mercury -56060-01-06 04:18 J -18754486.46 -18754486.32 -18754486.18 0.0082 0.0009

Mercury -56060-04-04 05:45 J -18754398.40 -18754398.26 -18754398.12 0.0082 0.0018

Mercury -56060-07-01 07:11 J -18754310.33 -18754310.20 -18754310.06 0.0081 0.0027

Mercury -56060-09-27 08:37 J -18754222.26 -18754222.14 -18754222.00 0.0081 0.0036

Mercury -56060-12-24 10:04 J -18754134.19 -18754134.08 -18754133.95 0.0081 0.0044

Mercury -56059-03-22 11:30 J -18754046.12 -18754046.02 -18754045.90 0.0081 0.0053

Mercury -56059-06-18 12:57 J -18753958.04 -18753957.96 -18753957.86 0.0081 0.0061

Earth -56059-06-27 15:06 J -18753948.93 -18753948.87 -18753948.81 0.0081 0.0078

Mercury -56059-09-14 14:23 J -18753869.96 -18753869.90 -18753869.82 0.0081 0.0070

Mercury -56059-12-11 15:49 J -18753781.86 -18753781.84 -18753781.80 0.0081 0.0078

Earth -56058-06-29 20:09 J -18753581.69 -18753581.66 -18753581.57 0.0080 0.0079

Venus -56051-03-02 10:33 J -18751144.15 -18751144.06 -18751143.92 0.0077 0.0066

Venus -56051-10-13 19:25 J -18750918.90 -18750918.69 -18750918.47 0.0076 0.0006

Venus -56050-05-27 03:49 J -18750693.49 -18750693.34 -18750693.18 0.0076 0.0052

# 56TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 56th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-55906-09-24 13:11 J	-18697976.98	-18697976.95	-18697976.88	0.0061	0.0059		
Mercury	-55906-12-21 14:37 J	-18697888.96	-18697888.89	-18697888.80	0.0061	0.0054		
Mercury	-55905-03-18 15:21 J	-18697800.94	-18697800.86	-18697800.74	0.0061	0.0050		
Mercury	-55905-06-14 16:47 J	-18697712.91	-18697712.80	-18697712.68	0.0061	0.0045		
Mercury	-55905-09-10 17:30 J	-18697624.88	-18697624.77	-18697624.62	0.0062	0.0041		
Mercury	-55905-12-07 18:57 J	-18697536.84	-18697536.71	-18697536.56	0.0062	0.0036		
Mercury	-55904-03-05 19:54 J	-18697448.81	-18697448.67	-18697448.51	0.0062	0.0032		
Mercury	-55904-06-01 21:06 J	-18697360.77	-18697360.62	-18697360.46	0.0062	0.0027		

Mercury -55904-08-28 22:18 J -18697272.73 -18697272.57 -18697272.40 0.0062 0.0022

Mercury -55904-11-24 23:16 J -18697184.69 -18697184.53 -18697184.35 0.0062 0.0018

Mercury -55903-02-21 00:28 J -18697096.64 -18697096.48 -18697096.30 0.0062 0.0013

Mercury -55903-05-20 01:40 J -18697008.60 -18697008.43 -18697008.25 0.0062 0.0008

Mercury -55903-08-16 02:52 J -18696920.55 -18696920.38 -18696920.20 0.0062 0.0004

Mercury -55903-11-12 04:04 J -18696832.51 -18696832.33 -18696832.16 0.0062 0.0001

Mercury -55902-02-08 05:01 J -18696744.46 -18696744.29 -18696744.11 0.0062 0.0007

Mercury -55902-05-07 06:13 J -18696656.41 -18696656.24 -18696656.06 0.0062 0.0011

Mercury -55902-08-03 07:25 J -18696568.35 -18696568.19 -18696568.01 0.0062 0.0016

Mercury -55902-10-30 08:37 J -18696480.30 -18696480.14 -18696479.97 0.0063 0.0021

Mercury -55901-01-26 09:35 J -18696392.25 -18696392.10 -18696391.93 0.0063 0.0026

Mercury -55901-04-23 10:47 J -18696304.19 -18696304.05 -18696303.88 0.0063 0.0031

Mercury -55901-07-20 11:59 J -18696216.13 -18696216.00 -18696215.84 0.0063 0.0036

Mercury -55901-10-16 13:11 J -18696128.07 -18696127.95 -18696127.80 0.0063 0.0041

Mercury -55900-01-12 14:23 J -18696040.00 -18696039.90 -18696039.76 0.0063 0.0046

Mercury -55900-04-10 15:35 J -18695951.93 -18695951.85 -18695951.73 0.0063 0.0051

Mercury -55900-07-07 16:47 J -18695863.86 -18695863.80 -18695863.70 0.0063 0.0056

Mercury -55900-10-03 17:59 J -18695775.77 -18695775.75 -18695775.68 0.0063 0.0062

Moon -55900-12-24 08:09 J -18695694.38 -18695694.16 -18695693.91 0.0063 0.0030

Earth -55900-12-24 09:21 J -18695694.31 -18695694.11 -18695693.86 0.0063 0.0032 \*

Earth -55899-12-25 20:52 J -18695327.79 -18695327.63 -18695327.42 0.0064 0.0044

Moon -55899-12-25 23:59 J -18695327.66 -18695327.50 -18695327.28 0.0064 0.0043 \*

Mars -55897-03-24 08:09 J -18694873.38 -18694873.16 -18694872.90 0.0064 0.0041

Venus -55889-11-15 05:01 J -18691715.41 -18691715.29 -18691715.12 0.0067 0.0052

Venus -55888-06-28 11:01 J -18691490.25 -18691490.04 -18691489.80 0.0068 0.0010

Venus -55887-02-08 17:01 J -18691264.98 -18691264.79 -18691264.59 0.0068 0.0033

Mercury -55814-05-26 20:23 J -18664494.68 -18664494.65 -18664494.61 0.0083 0.0080

Mercury -55814-08-22 22:04 J -18664406.65 -18664406.58 -18664406.50 0.0083 0.0070

Mercury -55814-11-18 23:30 J -18664318.61 -18664318.52 -18664318.41 0.0083 0.0061

Mercury -55813-02-15 01:11 J -18664230.55 -18664230.45 -18664230.33 0.0082 0.0051

Mercury -55813-05-13 02:52 J -18664142.50 -18664142.38 -18664142.25 0.0082 0.0042

Mercury -55813-08-09 04:33 J -18664054.44 -18664054.31 -18664054.17 0.0082 0.0032

Mercury -55813-11-05 05:59 J -18663966.38 -18663966.25 -18663966.10 0.0082 0.0023

Mercury -55812-02-01 07:40 J -18663878.32 -18663878.18 -18663878.03 0.0082 0.0014

Mercury -55812-04-30 09:21 J -18663790.26 -18663790.11 -18663789.97 0.0082 0.0005

Mercury -55812-07-27 10:47 J -18663702.19 -18663702.05 -18663701.90 0.0082 0.0005

Mercury -55812-10-23 12:13 J -18663614.13 -18663613.99 -18663613.84 0.0082 0.0014

Mercury -55811-01-19 13:40 J -18663526.06 -18663525.93 -18663525.78 0.0081 0.0023

Mercury -55811-04-17 15:06 J -18663437.99 -18663437.87 -18663437.73 0.0081 0.0031

Mercury -55811-07-14 16:33 J -18663349.92 -18663349.81 -18663349.67 0.0081 0.0040

Mercury -55811-10-10 18:13 J -18663261.85 -18663261.74 -18663261.62 0.0081 0.0048

Mercury -55810-01-06 19:25 J -18663173.78 -18663173.69 -18663173.57 0.0081 0.0057

Mercury -55810-04-04 21:06 J -18663085.70 -18663085.62 -18663085.53 0.0081 0.0065

Earth -55810-06-30 05:59 J -18662999.50 -18662999.25 -18662998.99 0.0081 0.0015

Moon -55810-06-30 07:40 J -18662999.43 -18662999.18 -18662998.91 0.0081 0.0013 \*

Mercury -55810-07-01 22:18 J -18662997.61 -18662997.57 -18662997.50 0.0081 0.0074

Venus -55803-09-15 12:28 J -18660365.06 -18660364.98 -18660364.87 0.0077 0.0069

Venus -55802-04-28 21:21 J -18660139.82 -18660139.61 -18660139.39 0.0076 0.0009

Venus -55802-12-10 05:45 J -18659914.43 -18659914.26 -18659914.10 0.0076 0.0049

Mercury -55657-04-13 19:25 J -18607192.70 -18607192.69 -18607192.64 0.0061 0.0061

Mercury -55657-07-10 20:52 J -18607104.69 -18607104.63 -18607104.55 0.0061 0.0056

Mercury -55657-10-06 21:49 J -18607016.67 -18607016.59 -18607016.48 0.0061 0.0052

Mercury -55656-01-02 23:01 J -18606928.64 -18606928.54 -18606928.42 0.0062 0.0047

Mercury -55656-03-31 23:59 J -18606840.61 -18606840.50 -18606840.36 0.0062 0.0043

Mercury -55656-06-28 01:11 J -18606752.58 -18606752.45 -18606752.31 0.0062 0.0038

Mercury -55656-09-24 02:09 J -18606664.54 -18606664.41 -18606664.25 0.0062 0.0034

Mercury -55656-12-21 03:21 J -18606576.50 -18606576.36 -18606576.20 0.0062 0.0029

Mercury -55655-03-19 04:47 J -18606488.46 -18606488.30 -18606488.15 0.0062 0.0024

Mercury -55655-06-15 05:30 J -18606400.42 -18606400.27 -18606400.09 0.0062 0.0020

Mercury -55655-09-11 06:42 J -18606312.38 -18606312.22 -18606312.04 0.0062 0.0015

Mercury -55655-12-08 07:54 J -18606224.34 -18606224.17 -18606223.99 0.0062 0.0011

Mercury -55654-03-06 09:06 J -18606136.29 -18606136.12 -18606135.94 0.0062 0.0006

Mercury -55654-06-02 10:18 J -18606048.24 -18606048.07 -18606047.89 0.0062 0.0001

Mercury -55654-08-29 11:30 J -18605960.20 -18605960.02 -18605959.85 0.0062 0.0004

Mercury -55654-11-25 12:42 J -18605872.15 -18605871.97 -18605871.80 0.0062 0.0009

Mercury -55653-02-21 13:40 J -18605784.09 -18605783.93 -18605783.75 0.0062 0.0014

Mercury -55653-05-19 14:52 J -18605696.04 -18605695.88 -18605695.71 0.0063 0.0019

Mercury -55653-08-15 15:49 J -18605607.99 -18605607.84 -18605607.66 0.0063 0.0024

Mercury -55653-11-11 17:01 J -18605519.93 -18605519.79 -18605519.62 0.0063 0.0029

Mercury -55652-02-07 18:13 J -18605431.87 -18605431.74 -18605431.58 0.0063 0.0034

Mercury -55652-05-06 19:25 J -18605343.81 -18605343.69 -18605343.54 0.0063 0.0039

Mercury -55652-08-02 21:06 J -18605255.75 -18605255.62 -18605255.50 0.0063 0.0043

Mercury -55652-10-29 22:18 J -18605167.68 -18605167.57 -18605167.46 0.0063 0.0049

Mercury -55651-01-25 23:01 J -18605079.61 -18605079.54 -18605079.43 0.0063 0.0054

Mercury -55651-04-24 00:13 J -18604991.53 -18604991.49 -18604991.41 0.0063 0.0059

Moon -55651-12-26 16:33 J -18604745.06 -18604744.81 -18604744.54 0.0063 0.0006

Earth -55651-12-26 19:54 J -18604744.92 -18604744.67 -18604744.40 0.0063 0.0004 \*

Mars -55649-07-01 06:42 J -18604192.52 -18604192.22 -18604191.91 0.0064 0.0017

Venus -55640-05-31 08:37 J -18600936.28 -18600936.14 -18600935.97 0.0067 0.0048

Venus -55639-01-11 14:37 J -18600711.11 -18600710.89 -18600710.67 0.0068 0.0006

Venus -55639-08-24 20:09 J -18600485.84 -18600485.66 -18600485.46 0.0068 0.0037

Mercury -55566-12-15 03:35 J -18573710.36 -18573710.35 -18573710.32 0.0083 0.0082

Mercury -55565-03-12 05:16 J -18573622.34 -18573622.28 -18573622.20 0.0083 0.0072

Mercury -55565-06-08 06:42 J -18573534.30 -18573534.22 -18573534.11 0.0083 0.0063

Mercury -55565-09-04 08:37 J -18573446.25 -18573446.14 -18573446.02 0.0082 0.0053

Mercury -55565-12-01 10:04 J -18573358.19 -18573358.08 -18573357.94 0.0082 0.0044

Mercury -55564-02-27 11:45 J -18573270.13 -18573270.01 -18573269.87 0.0082 0.0034

Mercury -55564-05-26 13:25 J -18573182.08 -18573181.94 -18573181.80 0.0082 0.0025

Mercury -55564-08-22 14:52 J -18573094.01 -18573093.88 -18573093.73 0.0082 0.0016

Mercury -55564-11-18 16:33 J -18573005.95 -18573005.81 -18573005.66 0.0082 0.0007

Mercury -55563-02-14 18:13 J -18572917.89 -18572917.74 -18572917.60 0.0082 0.0003  
 Mercury -55563-05-13 19:40 J -18572829.82 -18572829.68 -18572829.54 0.0082 0.0012  
 Mercury -55563-08-09 21:06 J -18572741.76 -18572741.62 -18572741.48 0.0081 0.0020  
 Mercury -55563-11-05 22:33 J -18572653.69 -18572653.56 -18572653.42 0.0081 0.0029  
 Mercury -55562-02-01 23:59 J -18572565.62 -18572565.50 -18572565.37 0.0081 0.0038  
 Mercury -55562-05-01 01:40 J -18572477.55 -18572477.43 -18572477.31 0.0081 0.0046  
 Mercury -55562-07-28 02:52 J -18572389.47 -18572389.38 -18572389.27 0.0081 0.0055  
 Mercury -55562-10-24 04:18 J -18572301.40 -18572301.32 -18572301.22 0.0081 0.0064  
 Mercury -55561-01-20 05:45 J -18572213.31 -18572213.26 -18572213.19 0.0081 0.0072  
 Mercury -55561-04-17 07:25 J -18572125.20 -18572125.19 -18572125.18 0.0080 0.0080  
 Moon -55561-07-01 22:47 J -18572049.68 -18572049.55 -18572049.35 0.0080 0.0063  
 Earth -55561-07-02 00:42 J -18572049.64 -18572049.47 -18572049.29 0.0080 0.0059 \*  
 Venus -55554-03-31 16:04 J -18569585.93 -18569585.83 -18569585.71 0.0077 0.0065  
 Venus -55554-11-12 00:42 J -18569360.68 -18569360.47 -18569360.25 0.0076 0.0005  
 Venus -55553-06-24 08:37 J -18569135.27 -18569135.14 -18569134.97 0.0076 0.0054  
 Mercury -55408-01-29 02:52 J -18516320.42 -18516320.38 -18516320.32 0.0061 0.0058  
 Mercury -55408-04-27 03:35 J -18516232.40 -18516232.35 -18516232.24 0.0061 0.0055  
 Mercury -55408-07-24 05:01 J -18516144.38 -18516144.29 -18516144.18 0.0061 0.0050  
 Mercury -55408-10-20 05:59 J -18516056.35 -18516056.25 -18516056.12 0.0062 0.0045  
 Mercury -55407-01-16 07:11 J -18515968.32 -18515968.20 -18515968.06 0.0062 0.0041  
 Mercury -55407-04-14 08:37 J -18515880.28 -18515880.14 -18515880.00 0.0062 0.0036  
 Mercury -55407-07-11 09:21 J -18515792.24 -18515792.11 -18515791.95 0.0062 0.0032  
 Mercury -55407-10-07 10:33 J -18515704.21 -18515704.06 -18515703.89 0.0062 0.0027  
 Mercury -55406-01-03 11:30 J -18515616.17 -18515616.02 -18515615.84 0.0062 0.0023  
 Mercury -55406-04-01 12:42 J -18515528.12 -18515527.97 -18515527.79 0.0062 0.0018  
 Mercury -55406-06-28 14:09 J -18515440.08 -18515439.91 -18515439.74 0.0062 0.0013  
 Mercury -55406-09-24 15:21 J -18515352.04 -18515351.86 -18515351.69 0.0062 0.0009  
 Mercury -55406-12-21 16:18 J -18515263.99 -18515263.82 -18515263.64 0.0062 0.0004  
 Mercury -55405-03-18 17:30 J -18515175.94 -18515175.77 -18515175.59 0.0062 0.0001  
 Mercury -55405-06-14 18:42 J -18515087.89 -18515087.72 -18515087.55 0.0062 0.0006



Mercury -55405-09-10 19:54 J -18514999.84 -18514999.67 -18514999.50 0.0062 0.0011  
 Mercury -55405-12-07 20:52 J -18514911.79 -18514911.63 -18514911.45 0.0063 0.0016  
 Mercury -55404-03-05 22:04 J -18514823.74 -18514823.58 -18514823.41 0.0063 0.0021  
 Mercury -55404-06-01 23:01 J -18514735.68 -18514735.54 -18514735.36 0.0063 0.0026  
 Mercury -55404-08-29 00:42 J -18514647.63 -18514647.47 -18514647.32 0.0063 0.0030  
 Mercury -55404-11-25 01:40 J -18514559.57 -18514559.43 -18514559.28 0.0063 0.0035  
 Mercury -55403-02-21 02:52 J -18514471.51 -18514471.38 -18514471.24 0.0063 0.0040  
 Mercury -55403-05-20 04:04 J -18514383.44 -18514383.33 -18514383.20 0.0063 0.0045  
 Mercury -55403-08-16 05:16 J -18514295.37 -18514295.28 -18514295.16 0.0063 0.0051  
 Mercury -55403-11-12 06:42 J -18514207.30 -18514207.22 -18514207.13 0.0063 0.0056  
 Earth -55403-12-27 17:16 J -18514161.95 -18514161.78 -18514161.55 0.0063 0.0040  
 Moon -55403-12-27 21:06 J -18514161.81 -18514161.62 -18514161.39 0.0063 0.0037 \*  
 Mercury -55402-02-08 07:54 J -18514119.21 -18514119.17 -18514119.12 0.0063 0.0061  
 Moon -55402-12-29 03:06 J -18513795.57 -18513795.37 -18513795.15 0.0064 0.0034  
 Earth -55402-12-29 04:47 J -18513795.49 -18513795.30 -18513795.06 0.0064 0.0036 \*  
 Mars -55401-10-08 03:21 J -18513511.65 -18513511.36 -18513511.04 0.0064 0.0012  
 Venus -55392-12-14 10:33 J -18510157.19 -18510157.06 -18510156.87 0.0067 0.0048  
 Venus -55391-07-27 16:47 J -18509932.02 -18509931.80 -18509931.58 0.0068 0.0005  
 Venus -55390-03-09 22:04 J -18509706.75 -18509706.58 -18509706.38 0.0068 0.0038  
 Mercury -55317-09-30 11:45 J -18482838.05 -18482838.01 -18482837.94 0.0083 0.0077  
 Mercury -55317-12-27 13:25 J -18482750.01 -18482749.94 -18482749.84 0.0083 0.0067  
 Mercury -55316-03-25 15:06 J -18482661.97 -18482661.87 -18482661.76 0.0082 0.0057  
 Mercury -55316-06-21 16:47 J -18482573.91 -18482573.80 -18482573.68 0.0082 0.0048  
 Mercury -55316-09-17 18:28 J -18482485.86 -18482485.73 -18482485.60 0.0082 0.0038  
 Mercury -55316-12-14 19:54 J -18482397.80 -18482397.67 -18482397.53 0.0082 0.0029  
 Mercury -55315-03-12 21:35 J -18482309.74 -18482309.60 -18482309.46 0.0082 0.0020  
 Mercury -55315-06-08 23:16 J -18482221.68 -18482221.53 -18482221.39 0.0082 0.0011  
 Mercury -55315-09-05 00:42 J -18482133.61 -18482133.47 -18482133.32 0.0082 0.0002  
 Mercury -55315-12-02 02:09 J -18482045.55 -18482045.41 -18482045.26 0.0082 0.0008  
 Mercury -55314-02-28 03:35 J -18481957.48 -18481957.35 -18481957.20 0.0081 0.0017

Mercury -55314-05-27 05:01 J -18481869.42 -18481869.29 -18481869.14 0.0081 0.0026

Mercury -55314-08-23 06:28 J -18481781.35 -18481781.23 -18481781.09 0.0081 0.0034

Mercury -55314-11-19 08:09 J -18481693.28 -18481693.16 -18481693.03 0.0081 0.0042

Mercury -55313-02-15 09:35 J -18481605.21 -18481605.10 -18481604.98 0.0081 0.0051

Mercury -55313-05-13 11:16 J -18481517.13 -18481517.03 -18481516.94 0.0081 0.0059

Earth -55313-07-02 10:04 J -18481467.30 -18481467.08 -18481466.83 0.0081 0.0034

Moon -55313-07-02 12:13 J -18481467.20 -18481466.99 -18481466.74 0.0081 0.0032 \*

Mercury -55313-08-09 12:13 J -18481429.05 -18481428.99 -18481428.90 0.0081 0.0068

Mercury -55313-11-05 13:54 J -18481340.96 -18481340.92 -18481340.87 0.0080 0.0076

Venus -55306-10-14 17:30 J -18478806.85 -18478806.77 -18478806.65 0.0077 0.0068

Venus -55305-05-27 02:37 J -18478581.61 -18478581.39 -18478581.17 0.0076 0.0008

Venus -55304-01-07 10:47 J -18478356.20 -18478356.05 -18478355.88 0.0076 0.0051

Mercury -55160-08-19 09:06 J -18425536.13 -18425536.12 -18425536.07 0.0061 0.0061

Mercury -55160-11-15 10:04 J -18425448.12 -18425448.08 -18425447.99 0.0061 0.0057

Mercury -55159-02-11 11:16 J -18425360.10 -18425360.03 -18425359.92 0.0062 0.0052

Mercury -55159-05-10 12:13 J -18425272.08 -18425271.99 -18425271.86 0.0062 0.0048

Mercury -55159-08-06 13:40 J -18425184.04 -18425183.93 -18425183.80 0.0062 0.0043

Mercury -55159-11-02 14:52 J -18425096.01 -18425095.88 -18425095.74 0.0062 0.0038

Mercury -55158-01-29 15:49 J -18425007.97 -18425007.84 -18425007.68 0.0062 0.0034

Mercury -55158-04-27 17:01 J -18424919.94 -18424919.79 -18424919.63 0.0062 0.0029

Mercury -55158-07-24 17:59 J -18424831.90 -18424831.75 -18424831.58 0.0062 0.0025

Mercury -55158-10-20 19:11 J -18424743.86 -18424743.70 -18424743.53 0.0062 0.0020

Mercury -55157-01-16 20:23 J -18424655.81 -18424655.65 -18424655.48 0.0062 0.0015

Mercury -55157-04-13 21:35 J -18424567.77 -18424567.60 -18424567.42 0.0062 0.0011

Mercury -55157-07-10 22:47 J -18424479.72 -18424479.55 -18424479.38 0.0062 0.0006

Mercury -55157-10-06 23:59 J -18424391.68 -18424391.50 -18424391.33 0.0062 0.0001

Mercury -55156-01-03 01:11 J -18424303.63 -18424303.45 -18424303.28 0.0062 0.0004

Mercury -55156-04-01 02:09 J -18424215.58 -18424215.41 -18424215.23 0.0063 0.0009

Mercury -55156-06-28 03:21 J -18424127.53 -18424127.36 -18424127.18 0.0063 0.0013

Mercury -55156-09-24 04:18 J -18424039.47 -18424039.32 -18424039.14 0.0063 0.0019

Mercury -55156-12-21 05:45 J -18423951.42 -18423951.26 -18423951.09 0.0063 0.0023

Mercury -55155-03-19 06:57 J -18423863.36 -18423863.21 -18423863.05 0.0063 0.0028

Mercury -55155-06-15 07:54 J -18423775.31 -18423775.17 -18423775.01 0.0063 0.0033

Mercury -55155-09-11 09:06 J -18423687.25 -18423687.12 -18423686.97 0.0063 0.0038

Mercury -55155-12-08 10:18 J -18423599.18 -18423599.07 -18423598.93 0.0063 0.0043

Mercury -55154-03-06 11:30 J -18423511.12 -18423511.02 -18423510.89 0.0063 0.0049

Mercury -55154-06-02 12:57 J -18423423.04 -18423422.96 -18423422.86 0.0063 0.0053

Mercury -55154-08-29 14:09 J -18423334.96 -18423334.91 -18423334.84 0.0063 0.0059

Earth -55154-12-30 04:18 J -18423212.57 -18423212.32 -18423212.06 0.0063 0.0005

Moon -55154-12-30 05:59 J -18423212.52 -18423212.25 -18423211.98 0.0063 0.0003 \*

Mars -55152-01-15 02:52 J -18422830.62 -18422830.38 -18422830.09 0.0064 0.0034

Venus -55143-06-29 14:23 J -18419378.06 -18419377.90 -18419377.71 0.0068 0.0043

Venus -55142-02-09 20:23 J -18419152.88 -18419152.65 -18419152.43 0.0068 0.0001

Venus -55142-09-23 01:40 J -18418927.58 -18418927.43 -18418927.24 0.0068 0.0043

Mercury -55068-04-20 19:25 J -18392053.73 -18392053.69 -18392053.63 0.0083 0.0077

Mercury -55068-07-17 20:52 J -18391965.70 -18391965.63 -18391965.53 0.0083 0.0068

Mercury -55068-10-13 22:47 J -18391877.65 -18391877.55 -18391877.44 0.0082 0.0058

Mercury -55067-01-10 00:13 J -18391789.59 -18391789.49 -18391789.36 0.0082 0.0049

Mercury -55067-04-08 01:54 J -18391701.54 -18391701.42 -18391701.28 0.0082 0.0039

Mercury -55067-07-05 03:35 J -18391613.48 -18391613.35 -18391613.21 0.0082 0.0030

Mercury -55067-10-01 05:01 J -18391525.42 -18391525.29 -18391525.14 0.0082 0.0021

Mercury -55067-12-28 06:42 J -18391437.36 -18391437.22 -18391437.07 0.0082 0.0012

Mercury -55066-03-26 08:23 J -18391349.30 -18391349.15 -18391349.01 0.0082 0.0002

Mercury -55066-06-22 09:49 J -18391261.23 -18391261.09 -18391260.94 0.0081 0.0007

Mercury -55066-09-18 11:16 J -18391173.17 -18391173.03 -18391172.88 0.0081 0.0016

Mercury -55066-12-15 12:42 J -18391085.10 -18391084.97 -18391084.82 0.0081 0.0024

Mercury -55065-03-12 14:09 J -18390997.03 -18390996.91 -18390996.77 0.0081 0.0033

Mercury -55065-06-08 15:49 J -18390908.96 -18390908.84 -18390908.71 0.0081 0.0041

Mercury -55065-09-04 17:01 J -18390820.89 -18390820.79 -18390820.66 0.0081 0.0050

Mercury -55065-12-01 18:28 J -18390732.81 -18390732.73 -18390732.62 0.0081 0.0059

Mercury -55064-02-27 19:54 J -18390644.74 -18390644.67 -18390644.58 0.0081 0.0067

Mercury -55064-05-26 21:35 J -18390556.65 -18390556.60 -18390556.55 0.0080 0.0075

Earth -55064-07-05 06:42 J -18390517.44 -18390517.22 -18390517.01 0.0080 0.0044

Moon -55064-07-05 09:49 J -18390517.28 -18390517.09 -18390516.87 0.0080 0.0048 \*

Venus -55057-04-28 22:04 J -18388027.70 -18388027.58 -18388027.43 0.0077 0.0061

Venus -55057-12-10 06:57 J -18387802.43 -18387802.21 -18387801.99 0.0076 0.0000

Venus -55056-07-23 14:37 J -18387577.00 -18387576.89 -18387576.73 0.0076 0.0059

# 55TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 55th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-54911-06-05 16:33 J	-18334663.85	-18334663.81	-18334663.75	0.0061	0.0059		
Mercury	-54911-09-01 17:16 J	-18334575.84	-18334575.78	-18334575.68	0.0062	0.0055		
Mercury	-54911-11-28 18:42 J	-18334487.81	-18334487.72	-18334487.61	0.0062	0.0050		
Mercury	-54910-02-24 19:25 J	-18334399.78	-18334399.69	-18334399.55	0.0062	0.0046		
Mercury	-54910-05-23 20:52 J	-18334311.75	-18334311.63	-18334311.49	0.0062	0.0041		
Mercury	-54910-08-19 21:49 J	-18334223.72	-18334223.59	-18334223.44	0.0062	0.0037		
Mercury	-54910-11-15 23:01 J	-18334135.68	-18334135.54	-18334135.38	0.0062	0.0032		
Mercury	-54909-02-11 23:59 J	-18334047.64	-18334047.50	-18334047.33	0.0062	0.0028		
Mercury	-54909-05-10 01:11 J	-18333959.60	-18333959.45	-18333959.28	0.0062	0.0023		
Mercury	-54909-08-06 02:23 J	-18333871.56	-18333871.40	-18333871.23	0.0062	0.0018		
Mercury	-54909-11-02 03:49 J	-18333783.51	-18333783.34	-18333783.17	0.0062	0.0014		

Mercury -54908-01-29 04:47 J -18333695.47 -18333695.30 -18333695.13 0.0062 0.0009

Mercury -54908-04-27 05:59 J -18333607.42 -18333607.25 -18333607.08 0.0062 0.0004

Mercury -54908-07-24 07:11 J -18333519.38 -18333519.20 -18333519.03 0.0062 0.0001

Mercury -54908-10-20 08:09 J -18333431.33 -18333431.16 -18333430.98 0.0062 0.0006

Mercury -54907-01-16 09:21 J -18333343.28 -18333343.11 -18333342.93 0.0063 0.0010

Mercury -54907-04-14 10:33 J -18333255.23 -18333255.06 -18333254.89 0.0063 0.0015

Mercury -54907-07-11 11:45 J -18333167.17 -18333167.01 -18333166.84 0.0063 0.0020

Mercury -54907-10-07 12:42 J -18333079.12 -18333078.97 -18333078.80 0.0063 0.0025

Mercury -54906-01-03 13:54 J -18332991.06 -18332990.92 -18332990.75 0.0063 0.0030

Mercury -54906-04-01 15:06 J -18332903.00 -18332902.87 -18332902.71 0.0063 0.0035

Mercury -54906-06-28 16:18 J -18332814.94 -18332814.82 -18332814.67 0.0063 0.0040

Mercury -54906-09-24 17:30 J -18332726.88 -18332726.77 -18332726.63 0.0063 0.0045

Mercury -54906-12-21 18:42 J -18332638.81 -18332638.72 -18332638.60 0.0063 0.0050

Earth -54906-12-31 01:40 J -18332629.57 -18332629.43 -18332629.23 0.0063 0.0049

Moon -54906-12-31 02:09 J -18332629.56 -18332629.41 -18332629.21 0.0063 0.0046 \*

Mercury -54905-03-18 19:54 J -18332550.73 -18332550.67 -18332550.57 0.0063 0.0056

Mercury -54905-06-14 21:06 J -18332462.65 -18332462.62 -18332462.55 0.0063 0.0061

Moon -54905-12-31 11:45 J -18332263.26 -18332263.01 -18332262.77 0.0064 0.0025

Earth -54905-12-31 13:25 J -18332263.16 -18332262.94 -18332262.68 0.0064 0.0027 \*

Mars -54904-04-23 23:30 J -18332149.53 -18332149.52 -18332149.43 0.0064 0.0063

Venus -54894-01-12 16:47 J -18328598.96 -18328598.80 -18328598.61 0.0067 0.0042

Venus -54894-08-25 22:33 J -18328373.78 -18328373.56 -18328373.33 0.0068 0.0001

Venus -54893-04-07 03:49 J -18328148.49 -18328148.34 -18328148.15 0.0068 0.0044

Mercury -54820-11-09 02:09 J -18301269.43 -18301269.41 -18301269.37 0.0083 0.0081

Mercury -54819-02-05 03:35 J -18301181.40 -18301181.35 -18301181.26 0.0083 0.0072

Mercury -54819-05-04 05:30 J -18301093.36 -18301093.27 -18301093.17 0.0082 0.0062

Mercury -54819-07-31 06:57 J -18301005.31 -18301005.21 -18301005.08 0.0082 0.0053

Mercury -54819-10-27 08:37 J -18300917.25 -18300917.14 -18300917.01 0.0082 0.0043

Mercury -54818-01-23 10:18 J -18300829.20 -18300829.07 -18300828.93 0.0082 0.0034

Mercury -54818-04-21 11:45 J -18300741.14 -18300741.01 -18300740.86 0.0082 0.0025

Mercury -54818-07-18 13:25 J -18300653.08 -18300652.94 -18300652.79 0.0082 0.0016

Mercury -54818-10-14 15:06 J -18300565.01 -18300564.87 -18300564.72 0.0082 0.0006

Mercury -54817-01-10 16:33 J -18300476.95 -18300476.81 -18300476.66 0.0081 0.0004

Mercury -54817-04-07 18:13 J -18300388.89 -18300388.74 -18300388.60 0.0081 0.0012

Mercury -54817-07-04 19:40 J -18300300.82 -18300300.68 -18300300.54 0.0081 0.0020

Mercury -54817-09-30 21:06 J -18300212.75 -18300212.62 -18300212.48 0.0081 0.0029

Mercury -54817-12-27 22:18 J -18300124.68 -18300124.57 -18300124.43 0.0081 0.0038

Mercury -54816-03-25 23:59 J -18300036.61 -18300036.50 -18300036.38 0.0081 0.0046

Mercury -54816-06-22 01:11 J -18299948.54 -18299948.45 -18299948.33 0.0081 0.0055

Moon -54816-07-05 13:54 J -18299935.12 -18299934.92 -18299934.70 0.0081 0.0044

Earth -54816-07-05 16:47 J -18299934.99 -18299934.80 -18299934.57 0.0081 0.0047 \*

Mercury -54816-09-18 02:52 J -18299860.46 -18299860.38 -18299860.29 0.0081 0.0063

Mercury -54816-12-15 04:04 J -18299772.38 -18299772.33 -18299772.25 0.0080 0.0071

Mercury -54815-03-13 05:30 J -18299684.27 -18299684.27 -18299684.24 0.0080 0.0080

Mars -54815-10-14 20:37 J -18299468.76 -18299468.64 -18299468.48 0.0080 0.0071

Venus -54809-11-11 23:59 J -18297248.61 -18297248.50 -18297248.35 0.0077 0.0062

Venus -54808-06-25 08:52 J -18297023.34 -18297023.13 -18297022.91 0.0076 0.0002

Venus -54807-02-05 17:16 J -18296797.92 -18296797.78 -18296797.64 0.0076 0.0058

Mercury -54663-12-24 23:01 J -18243879.56 -18243879.54 -18243879.51 0.0061 0.0061

Mercury -54662-03-22 23:45 J -18243791.55 -18243791.51 -18243791.42 0.0062 0.0057

Mercury -54662-06-19 01:11 J -18243703.53 -18243703.45 -18243703.35 0.0062 0.0052

Mercury -54662-09-15 01:54 J -18243615.51 -18243615.42 -18243615.29 0.0062 0.0048

Mercury -54662-12-12 03:21 J -18243527.48 -18243527.36 -18243527.23 0.0062 0.0043

Mercury -54661-03-09 04:18 J -18243439.44 -18243439.32 -18243439.17 0.0062 0.0039

Mercury -54661-06-05 05:30 J -18243351.41 -18243351.27 -18243351.12 0.0062 0.0034

Mercury -54661-09-01 06:28 J -18243263.37 -18243263.23 -18243263.06 0.0062 0.0030

Mercury -54661-11-28 07:40 J -18243175.33 -18243175.18 -18243175.01 0.0062 0.0025

Mercury -54660-02-24 08:52 J -18243087.29 -18243087.13 -18243086.96 0.0062 0.0021

Mercury -54660-05-23 09:49 J -18242999.24 -18242999.09 -18242998.91 0.0062 0.0017

Mercury -54660-08-19 11:01 J -18242911.20 -18242911.04 -18242910.86 0.0062 0.0012

Mercury -54660-11-15 12:28 J -18242823.15 -18242822.98 -18242822.81 0.0062 0.0006

Mercury -54659-02-11 13:25 J -18242735.11 -18242734.94 -18242734.76 0.0062 0.0003

Mercury -54659-05-10 14:37 J -18242647.06 -18242646.89 -18242646.71 0.0063 0.0004

Mercury -54659-08-06 15:49 J -18242559.01 -18242558.84 -18242558.66 0.0063 0.0008

Mercury -54659-11-02 17:01 J -18242470.96 -18242470.79 -18242470.62 0.0063 0.0013

Mercury -54658-01-29 17:59 J -18242382.91 -18242382.75 -18242382.57 0.0063 0.0018

Mercury -54658-04-27 19:11 J -18242294.85 -18242294.70 -18242294.53 0.0063 0.0023

Mercury -54658-07-24 20:23 J -18242206.80 -18242206.65 -18242206.48 0.0063 0.0028

Mercury -54658-10-20 21:21 J -18242118.74 -18242118.61 -18242118.44 0.0063 0.0033

Mercury -54657-01-16 23:01 J -18242030.68 -18242030.54 -18242030.40 0.0063 0.0038

Mercury -54657-04-14 00:13 J -18241942.62 -18241942.49 -18241942.36 0.0063 0.0043

Mercury -54657-07-11 00:57 J -18241854.55 -18241854.46 -18241854.32 0.0063 0.0049

Mercury -54657-10-07 02:09 J -18241766.48 -18241766.41 -18241766.29 0.0063 0.0054

Earth -54656-01-01 12:42 J -18241680.21 -18241679.97 -18241679.71 0.0063 0.0014

Moon -54656-01-01 15:35 J -18241680.09 -18241679.85 -18241679.59 0.0063 0.0012 \*

Mercury -54656-01-03 03:21 J -18241678.40 -18241678.36 -18241678.26 0.0063 0.0059

Mercury -54656-04-01 05:01 J -18241590.29 -18241590.29 -18241590.27 0.0064 0.0063

Moon -54655-01-02 20:09 J -18241313.73 -18241313.66 -18241313.53 0.0064 0.0059

Earth -54655-01-02 23:59 J -18241313.53 -18241313.50 -18241313.41 0.0064 0.0062 \*

Venus -54646-07-28 20:09 J -18237819.83 -18237819.66 -18237819.46 0.0068 0.0037

Venus -54645-03-10 01:54 J -18237594.64 -18237594.42 -18237594.19 0.0068 0.0006

Venus -54645-10-21 07:40 J -18237369.32 -18237369.18 -18237369.02 0.0068 0.0049

Mercury -54571-05-30 09:49 J -18210485.11 -18210485.09 -18210485.06 0.0083 0.0081

Mercury -54571-08-26 11:30 J -18210397.08 -18210397.02 -18210396.94 0.0082 0.0072

Mercury -54571-11-22 12:57 J -18210309.04 -18210308.96 -18210308.85 0.0082 0.0062

Mercury -54570-02-18 14:52 J -18210220.99 -18210220.88 -18210220.77 0.0082 0.0053

Mercury -54570-05-17 16:18 J -18210132.94 -18210132.82 -18210132.69 0.0082 0.0044

Mercury -54570-08-13 17:59 J -18210044.88 -18210044.75 -18210044.61 0.0082 0.0034

Mercury -54570-11-09 19:40 J -18209956.82 -18209956.68 -18209956.54 0.0082 0.0025

Mercury -54569-02-05 21:06 J -18209868.76 -18209868.62 -18209868.47 0.0082 0.0016

Mercury -54569-05-03 22:47 J -18209780.70 -18209780.55 -18209780.41 0.0082 0.0007  
 Mercury -54569-07-31 00:13 J -18209692.63 -18209692.49 -18209692.34 0.0081 0.0002  
 Mercury -54569-10-27 01:40 J -18209604.57 -18209604.43 -18209604.28 0.0081 0.0011  
 Mercury -54568-01-23 03:21 J -18209516.50 -18209516.36 -18209516.22 0.0081 0.0020  
 Mercury -54568-04-21 04:47 J -18209428.44 -18209428.30 -18209428.16 0.0081 0.0028  
 Mercury -54568-07-18 05:59 J -18209340.37 -18209340.25 -18209340.11 0.0081 0.0037  
 Mercury -54568-10-14 07:40 J -18209252.30 -18209252.18 -18209252.06 0.0081 0.0045  
 Mercury -54567-01-10 08:52 J -18209164.22 -18209164.13 -18209164.01 0.0081 0.0054  
 Mercury -54567-04-08 10:33 J -18209076.15 -18209076.06 -18209075.97 0.0080 0.0062  
 Mercury -54567-07-05 11:45 J -18208988.06 -18208988.01 -18208987.93 0.0080 0.0070  
 Moon -54567-07-08 12:57 J -18208985.17 -18208984.96 -18208984.72 0.0080 0.0035  
 Earth -54567-07-08 13:11 J -18208985.17 -18208984.95 -18208984.70 0.0080 0.0031 \*  
 Mercury -54567-10-01 13:11 J -18208899.97 -18208899.95 -18208899.91 0.0080 0.0078  
 Mars -54566-01-21 07:54 J -18208788.47 -18208788.17 -18208787.86 0.0080 0.0025  
 Venus -54560-05-28 04:33 J -18206469.45 -18206469.31 -18206469.14 0.0076 0.0054  
 Venus -54559-01-08 13:25 J -18206244.16 -18206243.94 -18206243.72 0.0076 0.0007  
 Venus -54559-08-21 21:49 J -18206018.70 -18206018.59 -18206018.49 0.0076 0.0066  
 Mercury -54414-10-11 05:45 J -18153007.28 -18153007.26 -18153007.20 0.0062 0.0060  
 Mercury -54413-01-07 07:11 J -18152919.27 -18152919.20 -18152919.12 0.0062 0.0055  
 Mercury -54413-04-04 07:54 J -18152831.25 -18152831.17 -18152831.05 0.0062 0.0051  
 Mercury -54413-07-01 09:21 J -18152743.22 -18152743.11 -18152742.99 0.0062 0.0046  
 Mercury -54413-09-27 10:04 J -18152655.19 -18152655.08 -18152654.93 0.0062 0.0042  
 Mercury -54413-12-24 11:30 J -18152567.15 -18152567.02 -18152566.88 0.0062 0.0037  
 Mercury -54412-03-22 12:28 J -18152479.12 -18152478.98 -18152478.82 0.0062 0.0033  
 Mercury -54412-06-18 13:40 J -18152391.08 -18152390.93 -18152390.77 0.0062 0.0028  
 Mercury -54412-09-14 14:52 J -18152303.04 -18152302.88 -18152302.72 0.0062 0.0024  
 Mercury -54412-12-11 15:49 J -18152214.99 -18152214.84 -18152214.66 0.0062 0.0019  
 Mercury -54411-03-09 17:01 J -18152126.95 -18152126.79 -18152126.61 0.0062 0.0015  
 Mercury -54411-06-05 18:13 J -18152038.91 -18152038.74 -18152038.56 0.0062 0.0010  
 Mercury -54411-09-01 19:25 J -18151950.86 -18151950.69 -18151950.51 0.0062 0.0005



Mercury -54411-11-28 20:37 J -18151862.81 -18151862.64 -18151862.46 0.0063 0.0001

Mercury -54410-02-24 21:49 J -18151774.76 -18151774.59 -18151774.42 0.0063 0.0005

Mercury -54410-05-23 22:47 J -18151686.71 -18151686.55 -18151686.37 0.0063 0.0010

Mercury -54410-08-19 23:59 J -18151598.66 -18151598.50 -18151598.32 0.0063 0.0015

Mercury -54410-11-16 01:11 J -18151510.61 -18151510.45 -18151510.28 0.0063 0.0019

Mercury -54409-02-12 02:23 J -18151422.55 -18151422.40 -18151422.23 0.0063 0.0024

Mercury -54409-05-10 03:35 J -18151334.50 -18151334.35 -18151334.19 0.0063 0.0029

Mercury -54409-08-06 04:47 J -18151246.44 -18151246.30 -18151246.15 0.0063 0.0034

Mercury -54409-11-02 05:45 J -18151158.38 -18151158.26 -18151158.10 0.0063 0.0040

Moon -54408-01-02 05:59 J -18151097.33 -18151097.25 -18151097.10 0.0063 0.0057

Earth -54408-01-02 09:49 J -18151097.16 -18151097.09 -18151096.96 0.0063 0.0058 \*

Mercury -54408-01-29 06:57 J -18151070.31 -18151070.21 -18151070.07 0.0063 0.0045

Mercury -54408-04-27 08:09 J -18150982.25 -18150982.16 -18150982.03 0.0063 0.0050

Mercury -54408-07-24 09:35 J -18150894.17 -18150894.10 -18150894.00 0.0063 0.0055

Mercury -54408-10-20 10:47 J -18150806.09 -18150806.05 -18150805.98 0.0063 0.0060

Earth -54407-01-03 21:21 J -18150730.84 -18150730.61 -18150730.34 0.0064 0.0017

Moon -54407-01-04 01:11 J -18150730.71 -18150730.45 -18150730.19 0.0064 0.0014 \*

Venus -54397-02-10 22:18 J -18147040.74 -18147040.57 -18147040.37 0.0068 0.0037

Venus -54397-09-23 04:18 J -18146815.54 -18146815.32 -18146815.10 0.0068 0.0006

Venus -54396-05-06 09:49 J -18146590.24 -18146590.09 -18146589.93 0.0068 0.0050

Mercury -54322-03-16 18:13 J -18119612.79 -18119612.74 -18119612.68 0.0082 0.0076

Mercury -54322-06-12 19:40 J -18119524.75 -18119524.68 -18119524.58 0.0082 0.0067

Mercury -54322-09-08 21:21 J -18119436.70 -18119436.61 -18119436.49 0.0082 0.0057

Mercury -54322-12-05 23:16 J -18119348.65 -18119348.53 -18119348.41 0.0082 0.0048

Mercury -54321-03-03 00:42 J -18119260.59 -18119260.47 -18119260.34 0.0082 0.0038

Mercury -54321-05-30 02:23 J -18119172.54 -18119172.40 -18119172.26 0.0082 0.0029

Mercury -54321-08-26 03:49 J -18119084.48 -18119084.34 -18119084.19 0.0082 0.0020

Mercury -54321-11-22 05:30 J -18118996.41 -18118996.27 -18118996.13 0.0082 0.0011

Mercury -54320-02-18 06:57 J -18118908.35 -18118908.21 -18118908.06 0.0081 0.0003

Mercury -54320-05-17 08:23 J -18118820.29 -18118820.15 -18118820.00 0.0081 0.0008

Mercury -54320-08-13 10:04 J -18118732.22 -18118732.08 -18118731.94 0.0081 0.0015

Mercury -54320-11-09 11:30 J -18118644.16 -18118644.02 -18118643.88 0.0081 0.0024

Mercury -54319-02-05 12:57 J -18118556.09 -18118555.96 -18118555.82 0.0081 0.0033

Mercury -54319-05-04 14:23 J -18118468.02 -18118467.90 -18118467.77 0.0081 0.0041

Moon -54319-07-08 22:04 J -18118402.74 -18118402.58 -18118402.36 0.0081 0.0058

Earth -54319-07-08 23:16 J -18118402.67 -18118402.53 -18118402.33 0.0081 0.0061 \*

Mercury -54319-07-31 15:49 J -18118379.95 -18118379.84 -18118379.72 0.0081 0.0050

Mercury -54319-10-27 17:16 J -18118291.87 -18118291.78 -18118291.68 0.0080 0.0058

Mercury -54318-01-23 18:28 J -18118203.79 -18118203.73 -18118203.64 0.0080 0.0067

Mercury -54318-04-21 19:54 J -18118115.71 -18118115.67 -18118115.60 0.0080 0.0075

Mars -54318-04-29 09:21 J -18118108.35 -18118108.11 -18118107.83 0.0080 0.0047

Venus -54312-12-11 06:42 J -18115690.37 -18115690.22 -18115690.06 0.0076 0.0054

Venus -54311-07-24 15:21 J -18115465.08 -18115464.86 -18115464.64 0.0076 0.0007

Venus -54310-03-06 23:30 J -18115239.62 -18115239.52 -18115239.41 0.0076 0.0066

Mercury -54165-04-30 12:28 J -18062222.98 -18062222.98 -18062222.96 0.0062 0.0062

Mercury -54165-07-27 13:40 J -18062134.99 -18062134.93 -18062134.86 0.0062 0.0057

Mercury -54165-10-23 14:23 J -18062046.97 -18062046.90 -18062046.79 0.0062 0.0053

Mercury -54164-01-19 15:21 J -18061958.94 -18061958.86 -18061958.73 0.0062 0.0049

Mercury -54164-04-17 16:47 J -18061870.91 -18061870.80 -18061870.67 0.0062 0.0044

Mercury -54164-07-14 17:30 J -18061782.88 -18061782.77 -18061782.61 0.0062 0.0040

Mercury -54164-10-10 18:57 J -18061694.84 -18061694.71 -18061694.56 0.0062 0.0035

Mercury -54163-01-06 20:09 J -18061606.80 -18061606.66 -18061606.50 0.0062 0.0030

Mercury -54163-04-04 21:06 J -18061518.76 -18061518.62 -18061518.45 0.0062 0.0026

Mercury -54163-07-01 22:18 J -18061430.72 -18061430.57 -18061430.40 0.0062 0.0022

Mercury -54163-09-27 23:30 J -18061342.68 -18061342.52 -18061342.35 0.0062 0.0017

Mercury -54163-12-25 00:42 J -18061254.64 -18061254.47 -18061254.29 0.0062 0.0012

Mercury -54162-03-23 01:54 J -18061166.59 -18061166.42 -18061166.24 0.0062 0.0007

Mercury -54162-06-19 03:06 J -18061078.54 -18061078.37 -18061078.20 0.0063 0.0003

Mercury -54162-09-15 04:18 J -18060990.49 -18060990.32 -18060990.15 0.0063 0.0002

Mercury -54162-12-12 05:30 J -18060902.44 -18060902.27 -18060902.10 0.0063 0.0007

Mercury -54161-03-09 06:28 J -18060814.39 -18060814.23 -18060814.05 0.0063 0.0012

Mercury -54161-06-05 07:40 J -18060726.34 -18060726.18 -18060726.01 0.0063 0.0017

Mercury -54161-09-01 08:52 J -18060638.29 -18060638.13 -18060637.96 0.0063 0.0022

Mercury -54161-11-28 09:49 J -18060550.23 -18060550.09 -18060549.92 0.0063 0.0027

Mercury -54160-02-24 11:01 J -18060462.17 -18060462.04 -18060461.87 0.0063 0.0032

Mercury -54160-05-23 12:42 J -18060374.11 -18060373.97 -18060373.83 0.0063 0.0037

Mercury -54160-08-19 13:54 J -18060286.05 -18060285.92 -18060285.79 0.0063 0.0042

Mercury -54160-11-15 15:06 J -18060197.99 -18060197.87 -18060197.75 0.0063 0.0047

Moon -54159-01-04 18:13 J -18060147.96 -18060147.74 -18060147.49 0.0063 0.0022

Earth -54159-01-04 20:52 J -18060147.85 -18060147.63 -18060147.37 0.0063 0.0025 \*

Mercury -54159-02-11 16:18 J -18060109.92 -18060109.82 -18060109.72 0.0063 0.0052

Mercury -54159-05-10 17:01 J -18060021.84 -18060021.79 -18060021.69 0.0064 0.0058

Mercury -54159-08-06 18:13 J -18059933.74 -18059933.74 -18059933.68 0.0064 0.0063

Earth -54158-01-06 08:09 J -18059781.29 -18059781.16 -18059780.98 0.0064 0.0051

Moon -54158-01-06 08:37 J -18059781.29 -18059781.14 -18059780.94 0.0064 0.0048 \*

Venus -54149-08-26 01:40 J -18056261.61 -18056261.43 -18056261.22 0.0068 0.0032

Venus -54148-04-08 07:25 J -18056036.40 -18056036.19 -18056035.96 0.0068 0.0012

Venus -54148-11-19 12:57 J -18055811.07 -18055810.96 -18055810.81 0.0068 0.0056

Mercury -54074-10-05 01:40 J -18028828.47 -18028828.43 -18028828.37 0.0082 0.0077

Mercury -54073-01-01 03:06 J -18028740.44 -18028740.37 -18028740.27 0.0082 0.0068

Mercury -54073-03-29 05:01 J -18028652.39 -18028652.29 -18028652.18 0.0082 0.0058

Mercury -54073-06-25 06:42 J -18028564.34 -18028564.22 -18028564.10 0.0082 0.0048

Mercury -54073-09-21 08:09 J -18028476.28 -18028476.16 -18028476.02 0.0082 0.0039

Mercury -54073-12-18 09:49 J -18028388.22 -18028388.09 -18028387.95 0.0082 0.0030

Mercury -54072-03-16 11:30 J -18028300.16 -18028300.02 -18028299.88 0.0082 0.0021

Mercury -54072-06-12 12:57 J -18028212.10 -18028211.96 -18028211.81 0.0082 0.0012

Mercury -54072-09-08 14:37 J -18028124.04 -18028123.89 -18028123.75 0.0081 0.0003

Mercury -54072-12-05 16:04 J -18028035.97 -18028035.83 -18028035.68 0.0081 0.0006

Mercury -54071-03-03 17:30 J -18027947.91 -18027947.77 -18027947.62 0.0081 0.0015

Mercury -54071-05-30 18:57 J -18027859.84 -18027859.71 -18027859.57 0.0081 0.0023

Mercury -54071-08-26 20:23 J -18027771.77 -18027771.65 -18027771.51 0.0081 0.0032

Mercury -54071-11-22 22:04 J -18027683.70 -18027683.58 -18027683.46 0.0081 0.0040

Mercury -54070-02-18 23:16 J -18027595.63 -18027595.53 -18027595.41 0.0081 0.0049

Mercury -54070-05-18 00:57 J -18027507.56 -18027507.46 -18027507.36 0.0080 0.0057

Moon -54070-07-11 16:47 J -18027453.05 -18027452.80 -18027452.55 0.0080 0.0019

Earth -54070-07-11 19:54 J -18027452.92 -18027452.67 -18027452.41 0.0080 0.0016 \*

Mercury -54070-08-14 01:54 J -18027419.48 -18027419.42 -18027419.32 0.0080 0.0066

Mercury -54070-11-10 03:35 J -18027331.40 -18027331.35 -18027331.28 0.0080 0.0073

Venus -54063-06-26 10:33 J -18024911.21 -18024911.06 -18024910.86 0.0076 0.0047

Venus -54062-02-06 19:40 J -18024685.89 -18024685.68 -18024685.47 0.0076 0.0015

Venus -54062-09-20 03:49 J -18024460.37 -18024460.34 -18024460.29 0.0076 0.0074

# 54TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 54th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-53916-02-14 19:40 J	-17971350.71	-17971350.68	-17971350.64	0.0062	0.0060		
Mercury	-53916-05-13 20:23 J	-17971262.70	-17971262.65	-17971262.56	0.0062	0.0056		
Mercury	-53916-08-09 21:21 J	-17971174.68	-17971174.61	-17971174.49	0.0062	0.0052		
Mercury	-53916-11-05 22:33 J	-17971086.65	-17971086.56	-17971086.43	0.0062	0.0047		
Mercury	-53915-02-01 23:30 J	-17970998.62	-17970998.52	-17970998.37	0.0062	0.0043		
Mercury	-53915-05-01 00:57 J	-17970910.59	-17970910.46	-17970910.32	0.0062	0.0038		
Mercury	-53915-07-28 02:09 J	-17970822.55	-17970822.41	-17970822.26	0.0062	0.0034		

Mercury -53915-10-24 03:06 J -17970734.51 -17970734.37 -17970734.21 0.0062 0.0029

Mercury -53914-01-20 04:18 J -17970646.47 -17970646.32 -17970646.15 0.0062 0.0025

Mercury -53914-04-18 05:45 J -17970558.43 -17970558.26 -17970558.10 0.0062 0.0020

Mercury -53914-07-15 06:28 J -17970470.39 -17970470.23 -17970470.05 0.0062 0.0016

Mercury -53914-10-11 07:54 J -17970382.34 -17970382.17 -17970382.00 0.0062 0.0010

Mercury -53913-01-07 09:06 J -17970294.29 -17970294.12 -17970293.95 0.0063 0.0006

Mercury -53913-04-04 10:18 J -17970206.25 -17970206.07 -17970205.90 0.0063 0.0001

Mercury -53913-07-01 11:30 J -17970118.20 -17970118.02 -17970117.85 0.0063 0.0004

Mercury -53913-09-27 12:28 J -17970030.15 -17970029.98 -17970029.80 0.0063 0.0009

Mercury -53913-12-24 13:25 J -17969942.10 -17969941.94 -17969941.76 0.0063 0.0014

Mercury -53912-03-22 14:52 J -17969854.04 -17969853.88 -17969853.71 0.0063 0.0018

Mercury -53912-06-18 16:04 J -17969765.99 -17969765.83 -17969765.66 0.0063 0.0023

Mercury -53912-09-14 17:01 J -17969677.93 -17969677.79 -17969677.62 0.0063 0.0029

Mercury -53912-12-11 18:13 J -17969589.87 -17969589.74 -17969589.58 0.0063 0.0034

Mercury -53911-03-09 19:25 J -17969501.81 -17969501.69 -17969501.54 0.0063 0.0039

Mercury -53911-06-05 20:37 J -17969413.75 -17969413.64 -17969413.50 0.0063 0.0044

Mercury -53911-09-01 21:49 J -17969325.68 -17969325.59 -17969325.46 0.0063 0.0049

Mercury -53911-11-28 23:01 J -17969237.61 -17969237.54 -17969237.43 0.0064 0.0054

Earth -53910-01-07 05:59 J -17969198.51 -17969198.25 -17969197.99 0.0064 0.0005

Moon -53910-01-07 06:13 J -17969198.48 -17969198.24 -17969197.98 0.0064 0.0004 \*

Mercury -53910-02-25 00:28 J -17969149.53 -17969149.48 -17969149.40 0.0064 0.0059

Venus -53900-03-11 04:04 J -17965482.52 -17965482.33 -17965482.12 0.0068 0.0031

Venus -53900-10-22 09:49 J -17965257.30 -17965257.09 -17965256.86 0.0068 0.0013

Venus -53899-06-04 15:21 J -17965031.97 -17965031.86 -17965031.72 0.0068 0.0056

Mercury -53825-04-24 08:23 J -17938044.17 -17938044.15 -17938044.11 0.0082 0.0081

Mercury -53825-07-21 09:49 J -17937956.14 -17937956.09 -17937956.00 0.0082 0.0072

Mercury -53825-10-17 11:59 J -17937868.10 -17937868.00 -17937867.91 0.0082 0.0062

Mercury -53824-01-13 13:25 J -17937780.05 -17937779.94 -17937779.82 0.0082 0.0052

Mercury -53824-04-11 15:06 J -17937691.99 -17937691.87 -17937691.74 0.0082 0.0043

Mercury -53824-07-08 16:47 J -17937603.93 -17937603.80 -17937603.67 0.0082 0.0034

Mercury -53824-10-04 18:13 J -17937515.88 -17937515.74 -17937515.60 0.0082 0.0025

Mercury -53824-12-31 19:54 J -17937427.81 -17937427.67 -17937427.53 0.0082 0.0016

Mercury -53823-03-29 21:21 J -17937339.75 -17937339.61 -17937339.46 0.0081 0.0007

Mercury -53823-06-25 23:01 J -17937251.69 -17937251.54 -17937251.40 0.0081 0.0002

Mercury -53823-09-22 00:28 J -17937163.62 -17937163.48 -17937163.34 0.0081 0.0010

Mercury -53823-12-19 01:54 J -17937075.56 -17937075.42 -17937075.28 0.0081 0.0019

Mercury -53822-03-17 03:21 J -17936987.49 -17936987.36 -17936987.22 0.0081 0.0028

Mercury -53822-06-13 05:01 J -17936899.42 -17936899.29 -17936899.16 0.0081 0.0036

Earth -53822-07-12 06:13 J -17936870.31 -17936870.24 -17936870.12 0.0081 0.0075

Moon -53822-07-12 09:49 J -17936870.18 -17936870.09 -17936869.94 0.0081 0.0072 \*

Mercury -53822-09-09 06:13 J -17936811.35 -17936811.24 -17936811.11 0.0081 0.0045

Mercury -53822-12-06 07:40 J -17936723.28 -17936723.18 -17936723.07 0.0080 0.0053

Mercury -53821-03-03 08:52 J -17936635.21 -17936635.13 -17936635.02 0.0080 0.0062

Mercury -53821-05-30 10:33 J -17936547.12 -17936547.06 -17936546.98 0.0080 0.0069

Moon -53821-07-13 08:52 J -17936503.17 -17936503.13 -17936503.02 0.0080 0.0076

Earth -53821-07-13 11:45 J -17936503.04 -17936503.01 -17936502.92 0.0080 0.0078 \*

Mercury -53821-08-26 11:59 J -17936459.03 -17936459.00 -17936458.96 0.0080 0.0077

Venus -53814-01-09 12:57 J -17934132.12 -17934131.96 -17934131.77 0.0076 0.0046

Venus -53814-08-22 21:35 J -17933906.80 -17933906.60 -17933906.37 0.0076 0.0016

Venus -53813-04-04 05:45 J -17933681.26 -17933681.26 -17933681.22 0.0076 0.0076

Mercury -53668-12-02 02:52 J -17880478.41 -17880478.38 -17880478.29 0.0062 0.0058

Mercury -53667-02-28 04:18 J -17880390.39 -17880390.32 -17880390.22 0.0062 0.0053

Mercury -53667-05-27 05:16 J -17880302.37 -17880302.28 -17880302.16 0.0062 0.0049

Mercury -53667-08-23 06:28 J -17880214.34 -17880214.23 -17880214.10 0.0062 0.0044

Mercury -53667-11-19 07:25 J -17880126.30 -17880126.19 -17880126.04 0.0062 0.0040

Mercury -53666-02-15 08:37 J -17880038.27 -17880038.14 -17880037.98 0.0062 0.0036

Mercury -53666-05-14 09:35 J -17879950.23 -17879950.10 -17879949.93 0.0062 0.0032

Mercury -53666-08-10 11:01 J -17879862.19 -17879862.04 -17879861.88 0.0062 0.0026

Mercury -53666-11-06 12:13 J -17879774.15 -17879773.99 -17879773.82 0.0062 0.0022

Mercury -53665-02-02 13:11 J -17879686.10 -17879685.95 -17879685.77 0.0062 0.0017

Mercury -53665-04-30 14:23 J -17879598.06 -17879597.90 -17879597.72 0.0063 0.0013

Mercury -53665-07-27 15:35 J -17879510.02 -17879509.85 -17879509.67 0.0063 0.0008

Mercury -53665-10-23 16:47 J -17879421.97 -17879421.80 -17879421.62 0.0063 0.0003

Mercury -53664-01-19 17:59 J -17879333.92 -17879333.75 -17879333.57 0.0063 0.0002

Mercury -53664-04-17 19:11 J -17879245.87 -17879245.70 -17879245.52 0.0063 0.0007

Mercury -53664-07-14 20:09 J -17879157.82 -17879157.66 -17879157.48 0.0063 0.0012

Mercury -53664-10-10 21:35 J -17879069.77 -17879069.60 -17879069.43 0.0063 0.0016

Mercury -53663-01-06 22:47 J -17878981.71 -17878981.55 -17878981.38 0.0063 0.0021

Mercury -53663-04-04 23:45 J -17878893.66 -17878893.51 -17878893.34 0.0063 0.0027

Mercury -53663-07-02 00:57 J -17878805.60 -17878805.46 -17878805.30 0.0063 0.0032

Mercury -53663-09-28 02:09 J -17878717.54 -17878717.41 -17878717.25 0.0063 0.0037

Mercury -53663-12-25 03:21 J -17878629.48 -17878629.36 -17878629.21 0.0063 0.0042

Moon -53662-01-08 03:49 J -17878615.56 -17878615.34 -17878615.10 0.0063 0.0031

Earth -53662-01-08 05:45 J -17878615.46 -17878615.26 -17878615.02 0.0063 0.0034 \*

Mercury -53662-03-23 04:33 J -17878541.41 -17878541.31 -17878541.18 0.0063 0.0047

Mercury -53662-06-19 05:45 J -17878453.34 -17878453.26 -17878453.14 0.0064 0.0052

Mercury -53662-09-15 07:11 J -17878365.27 -17878365.20 -17878365.11 0.0064 0.0057

Mercury -53662-12-12 08:23 J -17878277.17 -17878277.15 -17878277.10 0.0064 0.0062

Earth -53661-01-09 17:30 J -17878248.96 -17878248.77 -17878248.56 0.0064 0.0041

Moon -53661-01-09 20:09 J -17878248.83 -17878248.66 -17878248.43 0.0064 0.0039 \*

Mars -53661-07-23 00:57 J -17878053.60 -17878053.46 -17878053.24 0.0064 0.0052

Venus -53652-02-11 02:37 J -17874928.43 -17874928.39 -17874928.34 0.0067 0.0066

Venus -53652-09-24 07:54 J -17874703.36 -17874703.17 -17874702.94 0.0068 0.0024

Venus -53651-05-07 13:40 J -17874478.13 -17874477.93 -17874477.71 0.0068 0.0020

Venus -53651-12-18 18:57 J -17874252.75 -17874252.71 -17874252.61 0.0068 0.0064

Mercury -53577-11-12 16:04 J -17847259.85 -17847259.83 -17847259.79 0.0082 0.0081

Mercury -53576-02-08 17:45 J -17847171.82 -17847171.76 -17847171.68 0.0082 0.0071

Mercury -53576-05-07 19:11 J -17847083.78 -17847083.70 -17847083.59 0.0082 0.0062

Mercury -53576-08-03 20:52 J -17846995.73 -17846995.63 -17846995.50 0.0082 0.0053

Mercury -53576-10-30 22:47 J -17846907.67 -17846907.55 -17846907.42 0.0082 0.0043

Mercury -53575-01-27 00:28 J -17846819.61 -17846819.48 -17846819.35 0.0082 0.0034

Mercury -53575-04-25 01:54 J -17846731.56 -17846731.42 -17846731.28 0.0082 0.0025

Mercury -53575-07-22 03:21 J -17846643.49 -17846643.36 -17846643.21 0.0081 0.0017

Mercury -53575-10-18 05:01 J -17846555.43 -17846555.29 -17846555.14 0.0081 0.0008

Mercury -53574-01-14 06:42 J -17846467.37 -17846467.22 -17846467.08 0.0081 0.0002

Mercury -53574-04-12 08:09 J -17846379.30 -17846379.16 -17846379.02 0.0081 0.0010

Mercury -53574-07-09 09:35 J -17846291.24 -17846291.10 -17846290.96 0.0081 0.0019

Mercury -53574-10-05 11:01 J -17846203.17 -17846203.04 -17846202.90 0.0081 0.0027

Mercury -53573-01-01 12:28 J -17846115.10 -17846114.98 -17846114.84 0.0081 0.0036

Mercury -53573-03-29 14:09 J -17846027.03 -17846026.91 -17846026.79 0.0081 0.0044

Mercury -53573-06-25 15:21 J -17845938.96 -17845938.86 -17845938.74 0.0080 0.0052

Earth -53573-07-14 03:35 J -17845920.60 -17845920.35 -17845920.08 0.0080 0.0004

Moon -53573-07-14 05:30 J -17845920.53 -17845920.27 -17845919.99 0.0080 0.0007 \*

Mercury -53573-09-21 16:47 J -17845850.89 -17845850.80 -17845850.70 0.0080 0.0061

Mercury -53573-12-18 17:59 J -17845762.80 -17845762.75 -17845762.66 0.0080 0.0069

Mercury -53572-03-16 19:25 J -17845674.71 -17845674.69 -17845674.64 0.0080 0.0077

Venus -53566-07-25 17:30 J -17843352.94 -17843352.77 -17843352.56 0.0076 0.0036

Venus -53565-03-07 02:09 J -17843127.60 -17843127.41 -17843127.19 0.0076 0.0026

Mercury -53419-06-22 09:21 J -17789694.13 -17789694.11 -17789694.05 0.0062 0.0060

Mercury -53419-09-18 11:01 J -17789606.12 -17789606.04 -17789605.97 0.0062 0.0055

Mercury -53419-12-15 11:45 J -17789518.09 -17789518.01 -17789517.90 0.0062 0.0051

Mercury -53418-03-13 12:28 J -17789430.07 -17789429.98 -17789429.84 0.0062 0.0047

Mercury -53418-06-09 13:54 J -17789342.03 -17789341.92 -17789341.78 0.0062 0.0042

Mercury -53418-09-05 15:21 J -17789254.00 -17789253.86 -17789253.73 0.0062 0.0038

Mercury -53418-12-02 16:04 J -17789165.96 -17789165.83 -17789165.67 0.0062 0.0033

Mercury -53417-02-28 17:16 J -17789077.92 -17789077.78 -17789077.62 0.0062 0.0029

Mercury -53417-05-26 18:13 J -17788989.88 -17788989.74 -17788989.56 0.0062 0.0025

Mercury -53417-08-22 19:40 J -17788901.84 -17788901.68 -17788901.51 0.0062 0.0019

Mercury -53417-11-18 20:52 J -17788813.80 -17788813.63 -17788813.46 0.0063 0.0015

Mercury -53416-02-14 22:04 J -17788725.75 -17788725.58 -17788725.41 0.0063 0.0010



Mercury -53416-05-13 23:01 J -17788637.70 -17788637.54 -17788637.36 0.0063 0.0006

Mercury -53416-08-10 00:28 J -17788549.66 -17788549.48 -17788549.31 0.0063 0.0001

Mercury -53416-11-06 01:25 J -17788461.61 -17788461.44 -17788461.26 0.0063 0.0005

Mercury -53415-02-02 02:37 J -17788373.56 -17788373.39 -17788373.21 0.0063 0.0009

Mercury -53415-05-01 03:49 J -17788285.51 -17788285.34 -17788285.17 0.0063 0.0014

Mercury -53415-07-28 04:47 J -17788197.45 -17788197.30 -17788197.12 0.0063 0.0019

Mercury -53415-10-24 05:59 J -17788109.40 -17788109.25 -17788109.07 0.0063 0.0024

Mercury -53414-01-20 07:11 J -17788021.34 -17788021.20 -17788021.03 0.0063 0.0029

Mercury -53414-04-18 08:37 J -17787933.28 -17787933.14 -17787932.99 0.0063 0.0034

Mercury -53414-07-15 09:49 J -17787845.22 -17787845.09 -17787844.95 0.0063 0.0039

Mercury -53414-10-11 11:01 J -17787757.16 -17787757.04 -17787756.91 0.0063 0.0044

Mercury -53413-01-07 12:13 J -17787669.09 -17787668.99 -17787668.87 0.0064 0.0049

Moon -53413-01-10 12:28 J -17787666.23 -17787665.98 -17787665.71 0.0064 0.0004

Earth -53413-01-10 16:18 J -17787666.08 -17787665.82 -17787665.56 0.0064 0.0001 \*

Mercury -53413-04-04 13:40 J -17787581.02 -17787580.93 -17787580.84 0.0064 0.0054

Mercury -53413-07-01 14:23 J -17787492.94 -17787492.90 -17787492.81 0.0064 0.0060

Mars -53413-10-30 02:09 J -17787372.66 -17787372.41 -17787372.10 0.0064 0.0027

Venus -53404-08-27 05:30 J -17784149.34 -17784149.27 -17784149.16 0.0067 0.0062

Venus -53403-04-09 11:16 J -17783924.24 -17783924.03 -17783923.81 0.0068 0.0019

Venus -53403-11-20 16:47 J -17783698.99 -17783698.80 -17783698.58 0.0068 0.0025

Mercury -53328-08-30 00:57 J -17756387.51 -17756387.46 -17756387.38 0.0082 0.0074

Mercury -53328-11-26 02:37 J -17756299.47 -17756299.39 -17756299.29 0.0082 0.0064

Mercury -53327-02-22 04:18 J -17756211.42 -17756211.32 -17756211.20 0.0082 0.0055

Mercury -53327-05-21 05:45 J -17756123.36 -17756123.26 -17756123.12 0.0082 0.0046

Mercury -53327-08-17 07:25 J -17756035.31 -17756035.19 -17756035.05 0.0082 0.0037

Mercury -53327-11-13 09:06 J -17755947.25 -17755947.12 -17755946.97 0.0082 0.0028

Mercury -53326-02-09 10:47 J -17755859.19 -17755859.05 -17755858.90 0.0081 0.0019

Mercury -53326-05-08 12:28 J -17755771.13 -17755770.98 -17755770.84 0.0081 0.0010

Mercury -53326-08-04 13:54 J -17755683.06 -17755682.92 -17755682.77 0.0081 0.0002

Mercury -53326-10-31 15:21 J -17755595.00 -17755594.86 -17755594.71 0.0081 0.0008

Mercury -53325-01-27 16:47 J -17755506.93 -17755506.80 -17755506.65 0.0081 0.0017

Mercury -53325-04-24 18:28 J -17755418.87 -17755418.73 -17755418.59 0.0081 0.0025

Moon -53325-07-14 16:33 J -17755337.86 -17755337.81 -17755337.71 0.0081 0.0077

Earth -53325-07-14 17:01 J -17755337.83 -17755337.79 -17755337.74 0.0081 0.0079 \*

Mercury -53325-07-21 19:40 J -17755330.80 -17755330.68 -17755330.54 0.0081 0.0034

Mercury -53325-10-17 21:21 J -17755242.73 -17755242.61 -17755242.48 0.0081 0.0042

Mercury -53324-01-13 22:33 J -17755154.66 -17755154.56 -17755154.43 0.0080 0.0051

Mercury -53324-04-11 23:59 J -17755066.58 -17755066.50 -17755066.39 0.0080 0.0059

Mercury -53324-07-09 01:40 J -17754978.51 -17754978.43 -17754978.35 0.0080 0.0066

Moon -53324-07-16 20:23 J -17754970.75 -17754970.65 -17754970.50 0.0080 0.0070

Earth -53324-07-16 22:04 J -17754970.67 -17754970.58 -17754970.45 0.0080 0.0073 \*

Mercury -53324-10-05 03:06 J -17754890.42 -17754890.37 -17754890.32 0.0080 0.0074

Venus -53317-02-07 21:35 J -17752573.80 -17752573.60 -17752573.40 0.0076 0.0029

Venus -53317-09-20 05:59 J -17752348.44 -17752348.25 -17752348.05 0.0076 0.0032

Mercury -53170-01-10 16:47 J -17698909.82 -17698909.80 -17698909.75 0.0062 0.0060

Mercury -53170-04-08 17:45 J -17698821.82 -17698821.76 -17698821.67 0.0062 0.0056

Mercury -53170-07-05 19:11 J -17698733.79 -17698733.70 -17698733.60 0.0062 0.0051

Mercury -53170-10-01 19:54 J -17698645.76 -17698645.67 -17698645.54 0.0062 0.0047

Mercury -53170-12-28 21:21 J -17698557.73 -17698557.61 -17698557.48 0.0062 0.0043

Mercury -53169-03-25 22:04 J -17698469.70 -17698469.58 -17698469.43 0.0062 0.0039

Mercury -53169-06-21 23:30 J -17698381.66 -17698381.52 -17698381.37 0.0062 0.0034

Mercury -53169-09-18 00:28 J -17698293.62 -17698293.48 -17698293.32 0.0062 0.0029

Mercury -53169-12-15 01:40 J -17698205.58 -17698205.43 -17698205.26 0.0062 0.0025

Mercury -53168-03-13 02:52 J -17698117.54 -17698117.38 -17698117.21 0.0062 0.0020

Mercury -53168-06-09 03:49 J -17698029.50 -17698029.34 -17698029.16 0.0063 0.0016

Mercury -53168-09-05 05:01 J -17697941.45 -17697941.29 -17697941.11 0.0063 0.0011

Mercury -53168-12-02 06:28 J -17697853.40 -17697853.23 -17697853.06 0.0063 0.0006

Mercury -53167-02-28 07:40 J -17697765.36 -17697765.18 -17697765.01 0.0063 0.0001

Mercury -53167-05-27 08:52 J -17697677.31 -17697677.13 -17697676.96 0.0063 0.0004

Mercury -53167-08-23 09:49 J -17697589.26 -17697589.09 -17697588.91 0.0063 0.0009

Mercury -53167-11-19 11:16 J -17697501.20 -17697501.03 -17697500.86 0.0063 0.0014  
 Mercury -53166-02-15 12:13 J -17697413.15 -17697412.99 -17697412.82 0.0063 0.0018  
 Mercury -53166-05-14 13:25 J -17697325.10 -17697324.94 -17697324.77 0.0063 0.0023  
 Mercury -53166-08-10 14:23 J -17697237.04 -17697236.90 -17697236.73 0.0063 0.0029  
 Mercury -53166-11-06 15:35 J -17697148.98 -17697148.85 -17697148.68 0.0063 0.0034  
 Earth -53165-01-11 17:59 J -17697082.95 -17697082.75 -17697082.51 0.0063 0.0035  
 Moon -53165-01-11 21:06 J -17697082.82 -17697082.62 -17697082.36 0.0063 0.0033 \*  
 Mercury -53165-02-02 16:47 J -17697060.92 -17697060.80 -17697060.64 0.0063 0.0039  
 Mercury -53165-04-30 17:59 J -17696972.86 -17696972.75 -17696972.60 0.0064 0.0044  
 Mercury -53165-07-27 19:11 J -17696884.79 -17696884.70 -17696884.56 0.0064 0.0049  
 Mercury -53165-10-23 20:37 J -17696796.72 -17696796.64 -17696796.53 0.0064 0.0054  
 Moon -53164-01-12 03:21 J -17696716.54 -17696716.36 -17696716.13 0.0064 0.0038  
 Earth -53164-01-12 05:30 J -17696716.44 -17696716.27 -17696716.04 0.0064 0.0040 \*  
 Mercury -53164-01-19 21:49 J -17696708.64 -17696708.59 -17696708.51 0.0064 0.0059  
 Mars -53164-02-06 09:21 J -17696691.41 -17696691.11 -17696690.81 0.0064 0.0015  
 Venus -53155-03-12 10:47 J -17693370.18 -17693370.05 -17693369.87 0.0067 0.0050  
 Venus -53155-10-23 17:01 J -17693145.01 -17693144.79 -17693144.57 0.0068 0.0006  
 Venus -53154-06-05 22:04 J -17692919.74 -17692919.58 -17692919.37 0.0068 0.0038  
 Mercury -53080-12-22 07:40 J -17665691.20 -17665691.18 -17665691.14 0.0082 0.0080  
 Mercury -53079-03-20 09:21 J -17665603.17 -17665603.11 -17665603.03 0.0082 0.0071  
 Mercury -53079-06-16 10:47 J -17665515.13 -17665515.05 -17665514.94 0.0082 0.0062  
 Mercury -53079-09-12 12:28 J -17665427.08 -17665426.98 -17665426.85 0.0082 0.0053  
 Mercury -53079-12-09 14:09 J -17665339.02 -17665338.91 -17665338.77 0.0082 0.0044  
 Mercury -53078-03-07 15:49 J -17665250.96 -17665250.84 -17665250.70 0.0082 0.0035  
 Mercury -53078-06-03 17:30 J -17665162.90 -17665162.77 -17665162.63 0.0081 0.0025  
 Mercury -53078-08-30 19:11 J -17665074.84 -17665074.70 -17665074.56 0.0081 0.0016  
 Mercury -53078-11-26 20:37 J -17664986.78 -17664986.64 -17664986.49 0.0081 0.0008  
 Mercury -53077-02-22 22:18 J -17664898.72 -17664898.57 -17664898.43 0.0081 0.0002  
 Mercury -53077-05-20 23:45 J -17664810.65 -17664810.51 -17664810.37 0.0081 0.0010  
 Mercury -53077-08-17 01:11 J -17664722.59 -17664722.45 -17664722.31 0.0081 0.0018

Mercury -53077-11-13 02:37 J -17664634.52 -17664634.39 -17664634.25 0.0081 0.0027

Mercury -53076-02-09 04:04 J -17664546.45 -17664546.33 -17664546.19 0.0081 0.0035

Mercury -53076-05-08 05:30 J -17664458.38 -17664458.27 -17664458.14 0.0080 0.0044

Earth -53076-07-17 16:47 J -17664388.05 -17664387.80 -17664387.54 0.0080 0.0007

Moon -53076-07-17 18:57 J -17664387.95 -17664387.71 -17664387.45 0.0080 0.0011 \*

Mercury -53076-08-04 06:57 J -17664370.31 -17664370.21 -17664370.09 0.0080 0.0052

Mercury -53076-10-31 08:09 J -17664282.24 -17664282.16 -17664282.05 0.0080 0.0061

Mercury -53075-01-27 09:35 J -17664194.16 -17664194.10 -17664194.01 0.0080 0.0068

Mercury -53075-04-25 11:01 J -17664106.07 -17664106.04 -17664105.98 0.0080 0.0076

Venus -53069-01-10 18:57 J -17662019.75 -17662019.71 -17662019.65 0.0077 0.0074

Venus -53069-08-23 03:35 J -17661794.56 -17661794.35 -17661794.12 0.0076 0.0012

Venus -53068-04-05 11:59 J -17661569.15 -17661569.00 -17661568.82 0.0076 0.0049

# 53RD MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 53rd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-52922-07-31 23:45 J	-17608125.52	-17608125.51	-17608125.47	0.0062	0.0061		
Mercury	-52922-10-28 00:42 J	-17608037.52	-17608037.47	-17608037.38	0.0062	0.0057		
Mercury	-52921-01-24 01:54 J	-17607949.49	-17607949.42	-17607949.31	0.0062	0.0052		
Mercury	-52921-04-21 02:52 J	-17607861.47	-17607861.38	-17607861.25	0.0062	0.0048		
Mercury	-52921-07-18 04:18 J	-17607773.43	-17607773.32	-17607773.19	0.0062	0.0043		
Mercury	-52921-10-14 05:01 J	-17607685.40	-17607685.29	-17607685.13	0.0062	0.0040		

Mercury -52920-01-10 06:28 J -17607597.36 -17607597.23 -17607597.08 0.0062 0.0034

Mercury -52920-04-08 07:40 J -17607509.33 -17607509.18 -17607509.02 0.0062 0.0030

Mercury -52920-07-05 08:37 J -17607421.28 -17607421.14 -17607420.97 0.0062 0.0026

Mercury -52920-10-01 09:49 J -17607333.24 -17607333.09 -17607332.92 0.0063 0.0021

Mercury -52920-12-28 11:01 J -17607245.20 -17607245.04 -17607244.87 0.0063 0.0016

Mercury -52919-03-26 12:13 J -17607157.16 -17607156.99 -17607156.81 0.0063 0.0011

Mercury -52919-06-22 13:25 J -17607069.11 -17607068.94 -17607068.76 0.0063 0.0007

Mercury -52919-09-18 14:37 J -17606981.06 -17606980.89 -17606980.71 0.0063 0.0002

Mercury -52919-12-15 15:49 J -17606893.01 -17606892.84 -17606892.67 0.0063 0.0003

Mercury -52918-03-13 17:01 J -17606804.96 -17606804.79 -17606804.62 0.0063 0.0008

Mercury -52918-06-09 17:59 J -17606716.91 -17606716.75 -17606716.57 0.0063 0.0013

Mercury -52918-09-05 19:25 J -17606628.86 -17606628.69 -17606628.52 0.0063 0.0018

Mercury -52918-12-02 20:37 J -17606540.80 -17606540.64 -17606540.48 0.0063 0.0023

Mercury -52917-02-28 21:35 J -17606452.75 -17606452.60 -17606452.43 0.0063 0.0028

Mercury -52917-05-26 22:47 J -17606364.69 -17606364.55 -17606364.39 0.0063 0.0033

Mercury -52917-08-22 23:59 J -17606276.63 -17606276.50 -17606276.35 0.0064 0.0038

Mercury -52917-11-19 01:11 J -17606188.56 -17606188.45 -17606188.31 0.0064 0.0043

Earth -52916-01-13 07:11 J -17606133.45 -17606133.20 -17606132.93 0.0064 0.0005

Moon -52916-01-13 08:52 J -17606133.40 -17606133.13 -17606132.86 0.0064 0.0002 \*

Mercury -52916-02-15 02:23 J -17606100.50 -17606100.40 -17606100.27 0.0064 0.0048

Mercury -52916-05-14 03:35 J -17606012.43 -17606012.35 -17606012.23 0.0064 0.0053

Mars -52916-05-16 14:52 J -17606010.19 -17606009.88 -17606009.57 0.0064 0.0002

Mercury -52916-08-10 05:01 J -17605924.35 -17605924.29 -17605924.21 0.0064 0.0058

Mercury -52916-11-06 06:13 J -17605836.25 -17605836.24 -17605836.20 0.0064 0.0063

Venus -52907-09-25 16:18 J -17602591.00 -17602590.82 -17602590.63 0.0067 0.0038

Venus -52906-05-08 21:49 J -17602365.80 -17602365.59 -17602365.36 0.0068 0.0006

Venus -52906-12-20 03:35 J -17602140.50 -17602140.35 -17602140.19 0.0068 0.0049

Mercury -52831-07-12 16:04 J -17574906.87 -17574906.83 -17574906.78 0.0082 0.0079

Mercury -52831-10-08 17:30 J -17574818.83 -17574818.77 -17574818.68 0.0082 0.0070

Mercury -52830-01-04 19:11 J -17574730.79 -17574730.70 -17574730.59 0.0082 0.0060

Mercury -52830-04-02 20:52 J -17574642.74 -17574642.63 -17574642.51 0.0082 0.0051  
 Mercury -52830-06-29 22:33 J -17574554.68 -17574554.56 -17574554.43 0.0082 0.0042  
 Mercury -52830-09-26 00:13 J -17574466.62 -17574466.49 -17574466.35 0.0082 0.0033  
 Mercury -52830-12-23 01:54 J -17574378.56 -17574378.42 -17574378.28 0.0081 0.0024  
 Mercury -52829-03-20 03:21 J -17574290.50 -17574290.36 -17574290.21 0.0081 0.0015  
 Mercury -52829-06-16 05:01 J -17574202.44 -17574202.29 -17574202.15 0.0081 0.0007  
 Mercury -52829-09-12 06:28 J -17574114.37 -17574114.23 -17574114.08 0.0081 0.0002  
 Mercury -52829-12-09 07:54 J -17574026.31 -17574026.17 -17574026.02 0.0081 0.0011  
 Mercury -52828-03-07 09:21 J -17573938.24 -17573938.11 -17573937.96 0.0081 0.0020  
 Mercury -52828-06-03 11:01 J -17573850.18 -17573850.04 -17573849.91 0.0081 0.0028  
 Moon -52828-07-18 07:25 J -17573805.37 -17573805.19 -17573805.00 0.0081 0.0057  
 Earth -52828-07-18 10:47 J -17573805.21 -17573805.05 -17573804.86 0.0081 0.0060 \*  
 Mercury -52828-08-30 12:13 J -17573762.11 -17573761.99 -17573761.85 0.0080 0.0037  
 Mercury -52828-11-26 13:54 J -17573674.04 -17573673.92 -17573673.80 0.0080 0.0045  
 Mercury -52827-02-22 15:21 J -17573585.97 -17573585.86 -17573585.75 0.0080 0.0053  
 Mercury -52827-05-21 16:33 J -17573497.89 -17573497.81 -17573497.71 0.0080 0.0061  
 Mercury -52827-08-17 17:59 J -17573409.81 -17573409.75 -17573409.67 0.0080 0.0069  
 Mercury -52827-11-13 19:25 J -17573321.72 -17573321.69 -17573321.64 0.0080 0.0077  
 Venus -52821-07-26 01:25 J -17571240.59 -17571240.44 -17571240.30 0.0077 0.0057  
 Venus -52820-03-08 09:49 J -17571015.30 -17571015.09 -17571014.87 0.0076 0.0005  
 Venus -52820-10-19 17:45 J -17570789.84 -17570789.76 -17570789.62 0.0076 0.0066  
 Mercury -52673-02-19 08:09 J -17517341.20 -17517341.16 -17517341.11 0.0062 0.0059  
 Mercury -52673-05-17 08:52 J -17517253.19 -17517253.13 -17517253.04 0.0062 0.0055  
 Mercury -52673-08-13 10:18 J -17517165.17 -17517165.07 -17517164.97 0.0062 0.0051  
 Mercury -52673-11-09 11:01 J -17517077.14 -17517077.04 -17517076.91 0.0062 0.0047  
 Mercury -52672-02-05 12:28 J -17516989.10 -17516988.98 -17516988.85 0.0062 0.0042  
 Mercury -52672-05-04 13:11 J -17516901.07 -17516900.95 -17516900.80 0.0062 0.0038  
 Mercury -52672-07-31 14:37 J -17516813.03 -17516812.89 -17516812.74 0.0062 0.0033  
 Mercury -52672-10-27 15:35 J -17516724.99 -17516724.85 -17516724.69 0.0062 0.0028  
 Mercury -52671-01-23 16:47 J -17516636.95 -17516636.80 -17516636.63 0.0063 0.0024

Mercury -52671-04-21 17:59 J -17516548.91 -17516548.75 -17516548.58 0.0063 0.0019

Mercury -52671-07-18 18:57 J -17516460.87 -17516460.71 -17516460.53 0.0063 0.0015

Mercury -52671-10-14 20:09 J -17516372.82 -17516372.66 -17516372.48 0.0063 0.0010

Mercury -52670-01-10 21:35 J -17516284.77 -17516284.60 -17516284.43 0.0063 0.0005

Mercury -52670-04-08 22:47 J -17516196.72 -17516196.55 -17516196.38 0.0063 0.0000

Mercury -52670-07-05 23:45 J -17516108.68 -17516108.51 -17516108.33 0.0063 0.0006

Mercury -52670-10-02 01:11 J -17516020.62 -17516020.45 -17516020.28 0.0063 0.0010

Mercury -52670-12-29 02:09 J -17515932.57 -17515932.41 -17515932.23 0.0063 0.0015

Mercury -52669-03-26 03:21 J -17515844.52 -17515844.36 -17515844.19 0.0063 0.0020

Mercury -52669-06-22 04:33 J -17515756.46 -17515756.31 -17515756.14 0.0063 0.0024

Mercury -52669-09-18 05:45 J -17515668.40 -17515668.26 -17515668.10 0.0063 0.0029

Mercury -52669-12-15 06:42 J -17515580.35 -17515580.22 -17515580.05 0.0064 0.0035

Earth -52668-01-14 12:28 J -17515550.21 -17515549.98 -17515549.72 0.0064 0.0022

Moon -52668-01-14 12:42 J -17515550.20 -17515549.97 -17515549.72 0.0064 0.0020 \*

Mercury -52668-03-13 07:54 J -17515492.28 -17515492.17 -17515492.01 0.0064 0.0040

Mercury -52668-06-09 09:21 J -17515404.22 -17515404.11 -17515403.97 0.0064 0.0045

Mars -52668-08-24 03:49 J -17515328.64 -17515328.34 -17515328.03 0.0064 0.0004

Mercury -52668-09-05 10:33 J -17515316.15 -17515316.06 -17515315.93 0.0064 0.0050

Mercury -52668-12-02 11:45 J -17515228.08 -17515228.01 -17515227.90 0.0064 0.0055

Moon -52667-01-15 22:04 J -17515183.70 -17515183.58 -17515183.38 0.0064 0.0051

Earth -52667-01-15 23:59 J -17515183.62 -17515183.50 -17515183.33 0.0064 0.0053 \*

Mercury -52667-02-28 12:57 J -17515140.00 -17515139.96 -17515139.88 0.0064 0.0060

Venus -52659-08-28 17:59 J -17512036.81 -17512036.75 -17512036.62 0.0067 0.0061

Venus -52658-04-11 00:13 J -17511811.70 -17511811.49 -17511811.27 0.0068 0.0017

Venus -52658-11-22 05:45 J -17511586.45 -17511586.26 -17511586.04 0.0068 0.0027

Mercury -52583-11-03 23:45 J -17484210.52 -17484210.51 -17484210.49 0.0082 0.0082

Mercury -52582-01-31 01:25 J -17484122.50 -17484122.44 -17484122.37 0.0082 0.0072

Mercury -52582-04-29 03:06 J -17484034.46 -17484034.37 -17484034.27 0.0082 0.0063

Mercury -52582-07-26 04:33 J -17483946.41 -17483946.31 -17483946.19 0.0082 0.0054

Mercury -52582-10-22 06:13 J -17483858.35 -17483858.24 -17483858.11 0.0082 0.0045

Mercury -52581-01-18 07:54 J -17483770.30 -17483770.17 -17483770.03 0.0082 0.0036

Mercury -52581-04-15 09:35 J -17483682.24 -17483682.10 -17483681.96 0.0081 0.0027

Mercury -52581-07-12 11:01 J -17483594.18 -17483594.04 -17483593.89 0.0081 0.0018

Mercury -52581-10-08 12:42 J -17483506.11 -17483505.97 -17483505.82 0.0081 0.0009

Mercury -52580-01-04 14:09 J -17483418.05 -17483417.91 -17483417.76 0.0081 0.0003

Mercury -52580-04-02 15:49 J -17483329.99 -17483329.84 -17483329.70 0.0081 0.0008

Mercury -52580-06-29 17:16 J -17483241.92 -17483241.78 -17483241.64 0.0081 0.0016

Mercury -52580-09-25 18:42 J -17483153.85 -17483153.72 -17483153.58 0.0081 0.0025

Mercury -52580-12-22 20:09 J -17483065.79 -17483065.66 -17483065.52 0.0080 0.0033

Mercury -52579-03-20 21:35 J -17482977.72 -17482977.60 -17482977.47 0.0080 0.0042

Mercury -52579-06-16 23:16 J -17482889.65 -17482889.53 -17482889.42 0.0080 0.0050

Moon -52579-07-21 12:13 J -17482855.18 -17482854.99 -17482854.76 0.0080 0.0044

Earth -52579-07-21 15:49 J -17482855.05 -17482854.84 -17482854.61 0.0080 0.0042 \*

Mercury -52579-09-13 00:13 J -17482801.57 -17482801.49 -17482801.37 0.0080 0.0058

Mercury -52579-12-10 01:40 J -17482713.49 -17482713.43 -17482713.33 0.0080 0.0066

Mercury -52578-03-08 03:06 J -17482625.41 -17482625.37 -17482625.30 0.0080 0.0074

Venus -52572-02-08 10:18 J -17480461.27 -17480461.07 -17480460.86 0.0076 0.0029

Venus -52572-09-21 18:28 J -17480235.91 -17480235.73 -17480235.51 0.0076 0.0033

Mercury -52425-09-08 15:49 J -17426556.88 -17426556.84 -17426556.76 0.0062 0.0058

Mercury -52425-12-05 17:16 J -17426468.86 -17426468.78 -17426468.69 0.0062 0.0054

Mercury -52424-03-03 17:59 J -17426380.84 -17426380.75 -17426380.63 0.0062 0.0049

Mercury -52424-05-30 19:25 J -17426292.80 -17426292.69 -17426292.57 0.0062 0.0045

Mercury -52424-08-26 20:09 J -17426204.77 -17426204.66 -17426204.51 0.0062 0.0041

Mercury -52424-11-22 21:35 J -17426116.73 -17426116.60 -17426116.45 0.0062 0.0036

Mercury -52423-02-18 22:33 J -17426028.70 -17426028.56 -17426028.40 0.0063 0.0031

Mercury -52423-05-17 23:45 J -17425940.66 -17425940.51 -17425940.35 0.0063 0.0027

Mercury -52423-08-14 00:57 J -17425852.62 -17425852.46 -17425852.29 0.0063 0.0022

Mercury -52423-11-10 01:54 J -17425764.57 -17425764.42 -17425764.24 0.0063 0.0018

Mercury -52422-02-06 03:06 J -17425676.53 -17425676.37 -17425676.19 0.0063 0.0013

Mercury -52422-05-05 04:33 J -17425588.48 -17425588.31 -17425588.14 0.0063 0.0008



Mercury -52422-08-01 05:45 J -17425500.44 -17425500.26 -17425500.09 0.0063 0.0003

Mercury -52422-10-28 06:57 J -17425412.39 -17425412.21 -17425412.04 0.0063 0.0002

Mercury -52421-01-24 08:09 J -17425324.34 -17425324.16 -17425323.99 0.0063 0.0007

Mercury -52421-04-21 09:06 J -17425236.28 -17425236.12 -17425235.94 0.0063 0.0012

Mercury -52421-07-18 10:18 J -17425148.23 -17425148.07 -17425147.90 0.0063 0.0016

Mercury -52421-10-14 11:30 J -17425060.18 -17425060.02 -17425059.85 0.0063 0.0021

Mercury -52420-01-10 12:28 J -17424972.12 -17424971.98 -17424971.80 0.0063 0.0027

Moon -52420-01-15 16:33 J -17424966.97 -17424966.81 -17424966.59 0.0063 0.0045

Earth -52420-01-15 17:30 J -17424966.91 -17424966.77 -17424966.57 0.0063 0.0048 \*

Mercury -52420-04-08 13:40 J -17424884.06 -17424883.93 -17424883.76 0.0064 0.0032

Mercury -52420-07-05 15:21 J -17424796.00 -17424795.86 -17424795.72 0.0064 0.0036

Mercury -52420-10-01 16:33 J -17424707.94 -17424707.81 -17424707.68 0.0064 0.0041

Mars -52420-12-01 17:01 J -17424647.08 -17424646.79 -17424646.48 0.0064 0.0007

Mercury -52420-12-28 17:45 J -17424619.87 -17424619.76 -17424619.64 0.0064 0.0046

Earth -52419-01-17 05:16 J -17424600.49 -17424600.28 -17424600.02 0.0064 0.0027

Moon -52419-01-17 08:23 J -17424600.37 -17424600.15 -17424599.90 0.0064 0.0024 \*

Mercury -52419-03-26 18:28 J -17424531.80 -17424531.73 -17424531.60 0.0064 0.0052

Mercury -52419-06-22 19:54 J -17424443.73 -17424443.67 -17424443.57 0.0064 0.0057

Mercury -52419-09-18 21:06 J -17424355.64 -17424355.62 -17424355.55 0.0064 0.0062

Venus -52410-03-14 01:54 J -17421257.58 -17421257.42 -17421257.22 0.0067 0.0040

Venus -52410-10-25 08:09 J -17421032.38 -17421032.16 -17421031.94 0.0068 0.0004

Venus -52409-06-06 13:25 J -17420807.08 -17420806.94 -17420806.77 0.0068 0.0048

Mercury -52334-05-25 09:21 J -17393426.16 -17393426.11 -17393426.04 0.0082 0.0075

Mercury -52334-08-21 11:01 J -17393338.12 -17393338.04 -17393337.95 0.0082 0.0065

Mercury -52334-11-17 12:42 J -17393250.07 -17393249.97 -17393249.86 0.0082 0.0056

Mercury -52333-02-13 14:23 J -17393162.02 -17393161.90 -17393161.78 0.0082 0.0047

Mercury -52333-05-11 15:49 J -17393073.96 -17393073.84 -17393073.70 0.0082 0.0038

Mercury -52333-08-07 17:30 J -17392985.90 -17392985.77 -17392985.63 0.0081 0.0029

Mercury -52333-11-03 19:11 J -17392897.84 -17392897.70 -17392897.56 0.0081 0.0020

Mercury -52332-01-30 20:37 J -17392809.78 -17392809.64 -17392809.49 0.0081 0.0012

Mercury -52332-04-28 22:18 J -17392721.72 -17392721.57 -17392721.43 0.0081 0.0003

Mercury -52332-07-25 23:45 J -17392633.65 -17392633.51 -17392633.36 0.0081 0.0006

Mercury -52332-10-22 01:11 J -17392545.59 -17392545.45 -17392545.30 0.0081 0.0014

Mercury -52331-01-18 02:37 J -17392457.52 -17392457.39 -17392457.24 0.0081 0.0023

Mercury -52331-04-16 04:18 J -17392369.46 -17392369.32 -17392369.19 0.0080 0.0031

Mercury -52331-07-13 05:30 J -17392281.39 -17392281.27 -17392281.13 0.0080 0.0040

Earth -52331-07-22 16:47 J -17392272.06 -17392271.80 -17392271.54 0.0080 0.0004

Moon -52331-07-22 18:57 J -17392271.97 -17392271.71 -17392271.44 0.0080 0.0001 \*

Mercury -52331-10-09 06:57 J -17392193.32 -17392193.21 -17392193.08 0.0080 0.0048

Mercury -52330-01-05 08:37 J -17392105.24 -17392105.14 -17392105.04 0.0080 0.0055

Mercury -52330-04-03 09:35 J -17392017.17 -17392017.10 -17392016.99 0.0080 0.0064

Mercury -52330-06-30 11:01 J -17391929.08 -17391929.04 -17391928.96 0.0080 0.0072

Mercury -52330-09-26 12:42 J -17391840.97 -17391840.97 -17391840.95 0.0080 0.0079

Venus -52324-01-11 11:30 J -17389907.15 -17389907.02 -17389906.88 0.0077 0.0060

Venus -52324-08-24 20:09 J -17389681.88 -17389681.66 -17389681.44 0.0076 0.0003

Venus -52323-04-07 04:04 J -17389456.42 -17389456.33 -17389456.19 0.0076 0.0064

Mercury -52177-12-31 23:59 J -17335860.55 -17335860.50 -17335860.44 0.0062 0.0059

Mercury -52176-03-30 00:42 J -17335772.53 -17335772.47 -17335772.37 0.0062 0.0055

Mercury -52176-06-26 02:09 J -17335684.50 -17335684.41 -17335684.30 0.0062 0.0050

Mercury -52176-09-22 03:06 J -17335596.47 -17335596.37 -17335596.24 0.0062 0.0045

Mercury -52176-12-19 04:18 J -17335508.44 -17335508.32 -17335508.18 0.0062 0.0041

Mercury -52175-03-17 05:16 J -17335420.40 -17335420.28 -17335420.13 0.0062 0.0037

Mercury -52175-06-13 06:28 J -17335332.37 -17335332.23 -17335332.07 0.0063 0.0032

Mercury -52175-09-09 07:54 J -17335244.33 -17335244.17 -17335244.02 0.0063 0.0027

Mercury -52175-12-06 08:37 J -17335156.29 -17335156.14 -17335155.96 0.0063 0.0023

Mercury -52174-03-04 10:04 J -17335068.24 -17335068.08 -17335067.91 0.0063 0.0018

Mercury -52174-05-31 11:16 J -17334980.20 -17334980.03 -17334979.86 0.0063 0.0013

Mercury -52174-08-27 12:28 J -17334892.15 -17334891.98 -17334891.81 0.0063 0.0008

Mercury -52174-11-23 13:40 J -17334804.10 -17334803.93 -17334803.76 0.0063 0.0004

Mercury -52173-02-19 14:52 J -17334716.06 -17334715.88 -17334715.71 0.0063 0.0002

Mercury -52173-05-17 15:49 J -17334628.01 -17334627.84 -17334627.66 0.0063 0.0007

Mercury -52173-08-13 17:01 J -17334539.95 -17334539.79 -17334539.61 0.0063 0.0011

Mercury -52173-11-09 18:28 J -17334451.90 -17334451.73 -17334451.56 0.0063 0.0016

Earth -52172-01-17 03:06 J -17334383.37 -17334383.37 -17334383.36 0.0063 0.0063

Mercury -52172-02-05 19:25 J -17334363.85 -17334363.69 -17334363.52 0.0063 0.0021

Mercury -52172-05-04 20:37 J -17334275.79 -17334275.64 -17334275.47 0.0064 0.0026

Mercury -52172-07-31 21:49 J -17334187.73 -17334187.59 -17334187.43 0.0064 0.0031

Mercury -52172-10-27 23:01 J -17334099.67 -17334099.54 -17334099.38 0.0064 0.0036

Moon -52171-01-18 11:45 J -17334017.27 -17334017.01 -17334016.75 0.0064 0.0011

Earth -52171-01-18 14:37 J -17334017.13 -17334016.89 -17334016.62 0.0064 0.0010 \*

Mercury -52171-01-24 00:13 J -17334011.61 -17334011.49 -17334011.34 0.0064 0.0041

Mars -52171-03-11 12:42 J -17333965.23 -17333964.97 -17333964.67 0.0064 0.0025

Mercury -52171-04-22 01:25 J -17333923.54 -17333923.44 -17333923.30 0.0064 0.0046

Mercury -52171-07-19 02:37 J -17333835.47 -17333835.39 -17333835.27 0.0064 0.0051

Mercury -52171-10-15 04:04 J -17333747.40 -17333747.33 -17333747.24 0.0064 0.0056

Mercury -52170-01-11 05:16 J -17333659.31 -17333659.28 -17333659.22 0.0064 0.0062

Venus -52162-02-14 06:57 J -17330703.32 -17330703.21 -17330703.04 0.0067 0.0053

Venus -52162-09-27 13:11 J -17330478.17 -17330477.95 -17330477.73 0.0068 0.0009

Venus -52161-05-09 18:28 J -17330252.91 -17330252.73 -17330252.53 0.0068 0.0035

Mercury -52086-06-20 16:47 J -17302817.80 -17302817.80 -17302817.78 0.0082 0.0082

Mercury -52086-09-16 18:13 J -17302729.79 -17302729.74 -17302729.66 0.0082 0.0073

Mercury -52086-12-13 19:54 J -17302641.75 -17302641.67 -17302641.56 0.0082 0.0064

Mercury -52085-03-10 21:35 J -17302553.70 -17302553.60 -17302553.48 0.0082 0.0055

Mercury -52085-06-06 23:16 J -17302465.64 -17302465.53 -17302465.40 0.0082 0.0045

Mercury -52085-09-03 00:57 J -17302377.59 -17302377.46 -17302377.32 0.0081 0.0036

Mercury -52085-11-30 02:37 J -17302289.53 -17302289.39 -17302289.25 0.0081 0.0027

Mercury -52084-02-26 04:04 J -17302201.47 -17302201.33 -17302201.18 0.0081 0.0019

Mercury -52084-05-25 05:45 J -17302113.40 -17302113.26 -17302113.11 0.0081 0.0010

Mercury -52084-08-21 07:11 J -17302025.34 -17302025.20 -17302025.05 0.0081 0.0003

Mercury -52084-11-17 08:52 J -17301937.28 -17301937.13 -17301936.99 0.0081 0.0007

Mercury -52083-02-13 10:18 J -17301849.21 -17301849.07 -17301848.93 0.0081 0.0016

Mercury -52083-05-12 11:45 J -17301761.14 -17301761.01 -17301760.87 0.0080 0.0024

Moon -52083-07-23 20:52 J -17301688.85 -17301688.63 -17301688.40 0.0080 0.0035

Earth -52083-07-23 22:18 J -17301688.79 -17301688.57 -17301688.32 0.0080 0.0034 \*

Mercury -52083-08-08 13:11 J -17301673.08 -17301672.95 -17301672.81 0.0080 0.0032

Mercury -52083-11-04 14:37 J -17301585.01 -17301584.89 -17301584.76 0.0080 0.0041

Mercury -52082-01-31 15:49 J -17301496.94 -17301496.84 -17301496.71 0.0080 0.0050

Mercury -52082-04-29 17:30 J -17301408.86 -17301408.77 -17301408.66 0.0080 0.0057

Mercury -52082-07-26 18:42 J -17301320.79 -17301320.72 -17301320.62 0.0080 0.0065

Mercury -52082-10-22 20:09 J -17301232.70 -17301232.66 -17301232.59 0.0080 0.0073

Venus -52076-07-27 23:59 J -17299127.71 -17299127.50 -17299127.29 0.0076 0.0018

Venus -52075-03-10 08:09 J -17298902.32 -17298902.16 -17298901.97 0.0076 0.0045

# 52ND MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 52nd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-51928-04-25 07:40 J	-17245164.21	-17245164.18	-17245164.11	0.0062	0.0060		
Mercury	-51928-07-22 09:06 J	-17245076.19	-17245076.12	-17245076.03	0.0062	0.0055		
Mercury	-51928-10-18 09:49 J	-17244988.17	-17244988.09	-17244987.97	0.0062	0.0051		
Mercury	-51927-01-14 11:16 J	-17244900.14	-17244900.03	-17244899.91	0.0062	0.0046		
Mercury	-51927-04-12 12:13 J	-17244812.10	-17244811.99	-17244811.85	0.0062	0.0041		
Mercury	-51927-07-09 13:25 J	-17244724.07	-17244723.94	-17244723.79	0.0063	0.0037		

Mercury -51927-10-05 14:52 J -17244636.03 -17244635.88 -17244635.74 0.0063 0.0032

Mercury -51926-01-01 15:35 J -17244547.99 -17244547.85 -17244547.68 0.0063 0.0028

Mercury -51926-03-30 16:47 J -17244459.95 -17244459.80 -17244459.63 0.0063 0.0023

Mercury -51926-06-26 18:13 J -17244371.91 -17244371.74 -17244371.58 0.0063 0.0018

Mercury -51926-09-22 19:11 J -17244283.86 -17244283.70 -17244283.52 0.0063 0.0014

Mercury -51926-12-19 20:23 J -17244195.82 -17244195.65 -17244195.47 0.0063 0.0009

Mercury -51925-03-16 21:35 J -17244107.77 -17244107.60 -17244107.42 0.0063 0.0004

Mercury -51925-06-12 22:47 J -17244019.72 -17244019.55 -17244019.37 0.0063 0.0001

Mercury -51925-09-08 23:59 J -17243931.67 -17243931.50 -17243931.33 0.0063 0.0006

Mercury -51925-12-06 01:11 J -17243843.62 -17243843.45 -17243843.28 0.0063 0.0010

Mercury -51924-03-04 02:23 J -17243755.57 -17243755.40 -17243755.23 0.0063 0.0015

Mercury -51924-05-31 03:21 J -17243667.51 -17243667.36 -17243667.18 0.0064 0.0021

Mercury -51924-08-27 04:33 J -17243579.46 -17243579.31 -17243579.14 0.0064 0.0026

Mercury -51924-11-23 05:45 J -17243491.40 -17243491.26 -17243491.09 0.0064 0.0031

Earth -51923-01-19 23:59 J -17243433.75 -17243433.50 -17243433.24 0.0064 0.0007

Moon -51923-01-20 03:49 J -17243433.60 -17243433.34 -17243433.08 0.0064 0.0003 \*

Mercury -51923-02-19 07:25 J -17243403.34 -17243403.19 -17243403.05 0.0064 0.0035

Mercury -51923-05-18 08:37 J -17243315.27 -17243315.14 -17243315.01 0.0064 0.0040

Mars -51923-06-19 09:49 J -17243283.28 -17243283.09 -17243282.84 0.0064 0.0044

Mercury -51923-08-14 09:49 J -17243227.21 -17243227.09 -17243226.97 0.0064 0.0045

Mercury -51923-11-10 10:33 J -17243139.14 -17243139.06 -17243138.93 0.0064 0.0051

Mercury -51922-02-06 11:45 J -17243051.07 -17243051.01 -17243050.90 0.0064 0.0057

Mercury -51922-05-05 13:11 J -17242962.98 -17242962.95 -17242962.88 0.0064 0.0061

Venus -51914-01-17 12:13 J -17240149.03 -17240148.99 -17240148.90 0.0067 0.0064

Venus -51914-08-30 18:13 J -17239923.95 -17239923.74 -17239923.53 0.0068 0.0021

Venus -51913-04-11 23:30 J -17239698.72 -17239698.52 -17239698.30 0.0068 0.0023

Venus -51913-11-23 05:01 J -17239473.30 -17239473.29 -17239473.24 0.0068 0.0067

Mercury -51838-10-13 02:09 J -17212121.44 -17212121.41 -17212121.36 0.0082 0.0078

Mercury -51837-01-09 03:49 J -17212033.41 -17212033.34 -17212033.26 0.0082 0.0069

Mercury -51837-04-06 05:30 J -17211945.36 -17211945.27 -17211945.17 0.0082 0.0060

Mercury -51837-07-03 07:11 J -17211857.31 -17211857.20 -17211857.08 0.0082 0.0051

Mercury -51837-09-29 08:52 J -17211769.26 -17211769.13 -17211769.01 0.0081 0.0042

Mercury -51837-12-26 10:18 J -17211681.20 -17211681.07 -17211680.93 0.0081 0.0033

Mercury -51836-03-24 11:59 J -17211593.14 -17211593.00 -17211592.86 0.0081 0.0024

Mercury -51836-06-20 13:25 J -17211505.08 -17211504.94 -17211504.79 0.0081 0.0016

Mercury -51836-09-16 15:06 J -17211417.02 -17211416.87 -17211416.73 0.0081 0.0007

Mercury -51836-12-13 16:33 J -17211328.95 -17211328.81 -17211328.66 0.0081 0.0003

Mercury -51835-03-11 17:59 J -17211240.89 -17211240.75 -17211240.60 0.0081 0.0011

Mercury -51835-06-07 19:40 J -17211152.82 -17211152.68 -17211152.54 0.0081 0.0019

Earth -51835-07-25 05:01 J -17211105.44 -17211105.29 -17211105.08 0.0080 0.0059

Moon -51835-07-25 05:45 J -17211105.42 -17211105.26 -17211105.08 0.0080 0.0062 \*

Mercury -51835-09-03 20:52 J -17211064.76 -17211064.63 -17211064.48 0.0080 0.0028

Mercury -51835-11-30 22:33 J -17210976.69 -17210976.56 -17210976.43 0.0080 0.0035

Mercury -51834-02-26 23:59 J -17210888.62 -17210888.50 -17210888.37 0.0080 0.0043

Mercury -51834-05-26 01:25 J -17210800.55 -17210800.44 -17210800.33 0.0080 0.0051

Mercury -51834-08-22 02:37 J -17210712.47 -17210712.39 -17210712.28 0.0080 0.0060

Mercury -51834-11-18 04:04 J -17210624.39 -17210624.33 -17210624.24 0.0080 0.0068

Mercury -51833-02-14 05:16 J -17210536.30 -17210536.28 -17210536.21 0.0080 0.0076

Venus -51828-06-30 04:47 J -17208573.49 -17208573.30 -17208573.10 0.0077 0.0034

Venus -51827-02-10 13:11 J -17208348.14 -17208347.95 -17208347.73 0.0076 0.0029

Mercury -51680-05-21 15:35 J -17154555.85 -17154555.85 -17154555.82 0.0062 0.0062

Mercury -51680-08-17 16:47 J -17154467.85 -17154467.80 -17154467.73 0.0062 0.0058

Mercury -51680-11-13 17:30 J -17154379.83 -17154379.77 -17154379.66 0.0062 0.0054

Mercury -51679-02-09 18:57 J -17154291.80 -17154291.71 -17154291.59 0.0062 0.0049

Mercury -51679-05-08 19:54 J -17154203.77 -17154203.67 -17154203.53 0.0063 0.0045

Mercury -51679-08-04 21:06 J -17154115.74 -17154115.62 -17154115.48 0.0063 0.0040

Mercury -51679-10-31 22:18 J -17154027.70 -17154027.57 -17154027.42 0.0063 0.0035

Mercury -51678-01-27 23:16 J -17153939.66 -17153939.53 -17153939.36 0.0063 0.0031

Mercury -51678-04-26 00:28 J -17153851.62 -17153851.48 -17153851.31 0.0063 0.0026

Mercury -51678-07-23 01:54 J -17153763.58 -17153763.42 -17153763.26 0.0063 0.0021

Mercury -51678-10-19 02:52 J -17153675.54 -17153675.38 -17153675.21 0.0063 0.0017  
 Mercury -51677-01-15 04:04 J -17153587.49 -17153587.33 -17153587.15 0.0063 0.0012  
 Mercury -51677-04-12 05:16 J -17153499.45 -17153499.28 -17153499.10 0.0063 0.0007  
 Mercury -51677-07-09 06:28 J -17153411.40 -17153411.23 -17153411.05 0.0063 0.0003  
 Mercury -51677-10-05 07:40 J -17153323.35 -17153323.18 -17153323.00 0.0063 0.0003  
 Mercury -51676-01-01 08:52 J -17153235.30 -17153235.13 -17153234.96 0.0063 0.0007  
 Mercury -51676-03-30 10:04 J -17153147.25 -17153147.08 -17153146.91 0.0063 0.0012  
 Mercury -51676-06-26 11:01 J -17153059.19 -17153059.04 -17153058.86 0.0064 0.0018  
 Mercury -51676-09-22 12:13 J -17152971.14 -17152970.99 -17152970.81 0.0064 0.0023  
 Mercury -51676-12-19 13:25 J -17152883.08 -17152882.94 -17152882.77 0.0064 0.0028  
 Moon -51675-01-21 08:52 J -17152850.37 -17152850.13 -17152849.86 0.0064 0.0015  
 Earth -51675-01-21 12:13 J -17152850.23 -17152849.99 -17152849.72 0.0064 0.0015 \*  
 Mercury -51675-03-17 14:52 J -17152795.02 -17152794.88 -17152794.72 0.0064 0.0032  
 Mercury -51675-06-13 16:04 J -17152706.96 -17152706.83 -17152706.68 0.0064 0.0037  
 Mercury -51675-09-09 17:30 J -17152618.90 -17152618.77 -17152618.64 0.0064 0.0042  
 Mercury -51675-12-06 18:42 J -17152530.83 -17152530.72 -17152530.60 0.0064 0.0048  
 Earth -51674-01-22 23:45 J -17152483.56 -17152483.51 -17152483.39 0.0064 0.0060  
 Moon -51674-01-23 03:35 J -17152483.44 -17152483.35 -17152483.26 0.0064 0.0060 \*  
 Mercury -51674-03-04 19:25 J -17152442.76 -17152442.69 -17152442.57 0.0064 0.0054  
 Mercury -51674-05-31 20:52 J -17152354.68 -17152354.63 -17152354.54 0.0064 0.0058  
 Mercury -51674-08-27 22:04 J -17152266.59 -17152266.58 -17152266.53 0.0064 0.0064  
 Venus -51666-08-03 01:25 J -17149369.63 -17149369.44 -17149369.22 0.0067 0.0026  
 Venus -51665-03-15 06:57 J -17149144.41 -17149144.21 -17149143.98 0.0068 0.0019  
 Venus -51665-10-26 12:13 J -17148919.04 -17148918.99 -17148918.88 0.0068 0.0064  
 Mercury -51590-11-08 10:47 J -17121513.06 -17121513.05 -17121513.02 0.0082 0.0081  
 Mercury -51589-02-04 12:28 J -17121425.04 -17121424.98 -17121424.90 0.0082 0.0072  
 Mercury -51589-05-02 14:09 J -17121337.00 -17121336.91 -17121336.81 0.0082 0.0063  
 Mercury -51589-07-29 15:49 J -17121248.95 -17121248.84 -17121248.73 0.0082 0.0054  
 Mercury -51589-10-25 17:30 J -17121160.89 -17121160.77 -17121160.65 0.0081 0.0045  
 Mercury -51588-01-21 18:57 J -17121072.84 -17121072.71 -17121072.57 0.0081 0.0036

Mercury -51588-04-19 20:37 J -17120984.78 -17120984.64 -17120984.50 0.0081 0.0027  
 Mercury -51588-07-16 22:18 J -17120896.72 -17120896.57 -17120896.43 0.0081 0.0018  
 Mercury -51588-10-12 23:45 J -17120808.65 -17120808.51 -17120808.36 0.0081 0.0010  
 Mercury -51587-01-09 01:11 J -17120720.59 -17120720.45 -17120720.30 0.0081 0.0003  
 Mercury -51587-04-07 02:52 J -17120632.53 -17120632.38 -17120632.24 0.0081 0.0007  
 Mercury -51587-07-04 04:18 J -17120544.46 -17120544.32 -17120544.18 0.0080 0.0016  
 Earth -51587-07-26 17:16 J -17120521.90 -17120521.78 -17120521.65 0.0080 0.0070  
 Moon -51587-07-26 17:30 J -17120521.88 -17120521.77 -17120521.64 0.0080 0.0071 \*  
 Mercury -51587-09-30 05:45 J -17120456.39 -17120456.26 -17120456.12 0.0080 0.0024  
 Mercury -51587-12-27 07:11 J -17120368.33 -17120368.20 -17120368.06 0.0080 0.0032  
 Mercury -51586-03-25 08:52 J -17120280.26 -17120280.13 -17120280.01 0.0080 0.0041  
 Mercury -51586-06-21 09:49 J -17120192.19 -17120192.09 -17120191.96 0.0080 0.0049  
 Moon -51586-07-28 20:23 J -17120154.68 -17120154.65 -17120154.57 0.0080 0.0078  
 Earth -51586-07-28 22:18 J -17120154.60 -17120154.57 -17120154.49 0.0080 0.0078 \*  
 Mercury -51586-09-17 11:16 J -17120104.11 -17120104.03 -17120103.91 0.0080 0.0057  
 Mercury -51586-12-14 12:42 J -17120016.04 -17120015.97 -17120015.87 0.0080 0.0065  
 Mercury -51585-03-11 14:09 J -17119927.95 -17119927.91 -17119927.84 0.0080 0.0073  
 Venus -51580-06-02 11:59 J -17118019.18 -17118019.00 -17118018.81 0.0077 0.0041  
 Venus -51579-01-13 20:37 J -17117793.85 -17117793.64 -17117793.43 0.0076 0.0022  
 Mercury -51432-09-13 00:28 J -17063859.50 -17063859.48 -17063859.43 0.0062 0.0061  
 Mercury -51432-12-10 01:25 J -17063771.49 -17063771.44 -17063771.35 0.0062 0.0056  
 Mercury -51431-03-08 02:37 J -17063683.47 -17063683.39 -17063683.28 0.0062 0.0052  
 Mercury -51431-06-04 03:35 J -17063595.44 -17063595.35 -17063595.22 0.0063 0.0048  
 Mercury -51431-08-31 04:47 J -17063507.41 -17063507.30 -17063507.16 0.0063 0.0043  
 Mercury -51431-11-27 06:13 J -17063419.37 -17063419.24 -17063419.10 0.0063 0.0038  
 Mercury -51430-02-23 06:57 J -17063331.33 -17063331.21 -17063331.05 0.0063 0.0034  
 Mercury -51430-05-22 08:23 J -17063243.30 -17063243.15 -17063242.99 0.0063 0.0029  
 Mercury -51430-08-18 09:35 J -17063155.26 -17063155.10 -17063154.94 0.0063 0.0024  
 Mercury -51430-11-14 10:33 J -17063067.21 -17063067.06 -17063066.89 0.0063 0.0020  
 Mercury -51429-02-10 11:45 J -17062979.17 -17062979.01 -17062978.83 0.0063 0.0015



Mercury -51429-05-08 12:57 J -17062891.12 -17062890.96 -17062890.78 0.0063 0.0010

Mercury -51429-08-04 14:09 J -17062803.08 -17062802.91 -17062802.73 0.0063 0.0006

Mercury -51429-10-31 15:21 J -17062715.03 -17062714.86 -17062714.68 0.0063 0.0002

Mercury -51428-01-27 16:33 J -17062626.98 -17062626.81 -17062626.63 0.0063 0.0005

Mercury -51428-04-25 17:45 J -17062538.93 -17062538.76 -17062538.58 0.0064 0.0009

Mercury -51428-07-22 18:42 J -17062450.87 -17062450.72 -17062450.54 0.0064 0.0015

Mercury -51428-10-18 20:09 J -17062362.82 -17062362.66 -17062362.49 0.0064 0.0019

Mercury -51427-01-14 21:21 J -17062274.76 -17062274.61 -17062274.44 0.0064 0.0024

Earth -51427-01-23 00:42 J -17062266.70 -17062266.47 -17062266.21 0.0064 0.0023

Moon -51427-01-23 04:18 J -17062266.55 -17062266.32 -17062266.07 0.0064 0.0026 \*

Mercury -51427-04-12 22:33 J -17062186.71 -17062186.56 -17062186.40 0.0064 0.0029

Mercury -51427-07-09 23:45 J -17062098.65 -17062098.51 -17062098.35 0.0064 0.0034

Mercury -51427-10-06 00:57 J -17062010.59 -17062010.46 -17062010.31 0.0064 0.0039

Mercury -51426-01-02 02:09 J -17061922.52 -17061922.41 -17061922.27 0.0064 0.0045

Moon -51426-01-24 11:16 J -17061900.16 -17061900.03 -17061899.90 0.0064 0.0055

Earth -51426-01-24 12:28 J -17061900.11 -17061899.98 -17061899.80 0.0064 0.0051 \*

Mercury -51426-03-31 03:35 J -17061834.45 -17061834.35 -17061834.23 0.0064 0.0049

Mercury -51426-06-27 04:47 J -17061746.38 -17061746.30 -17061746.20 0.0064 0.0055

Mercury -51426-09-23 06:13 J -17061658.30 -17061658.24 -17061658.17 0.0064 0.0060

Venus -51418-07-06 09:06 J -17058815.31 -17058815.12 -17058814.91 0.0067 0.0030

Venus -51417-02-16 14:37 J -17058590.10 -17058589.89 -17058589.67 0.0068 0.0014

Venus -51417-09-28 19:25 J -17058364.77 -17058364.69 -17058364.55 0.0068 0.0059

Mercury -51341-03-01 21:06 J -17030816.66 -17030816.62 -17030816.54 0.0082 0.0074

Mercury -51341-05-28 22:47 J -17030728.62 -17030728.55 -17030728.44 0.0082 0.0065

Mercury -51341-08-25 00:28 J -17030640.57 -17030640.48 -17030640.36 0.0082 0.0056

Mercury -51341-11-21 02:09 J -17030552.52 -17030552.41 -17030552.28 0.0081 0.0046

Mercury -51340-02-17 03:49 J -17030464.46 -17030464.34 -17030464.20 0.0081 0.0037

Mercury -51340-05-16 05:30 J -17030376.41 -17030376.27 -17030376.13 0.0081 0.0028

Mercury -51340-08-12 06:57 J -17030288.35 -17030288.21 -17030288.06 0.0081 0.0020

Mercury -51340-11-08 08:37 J -17030200.28 -17030200.14 -17030199.99 0.0081 0.0011

Mercury -51339-02-04 10:04 J -17030112.22 -17030112.08 -17030111.93 0.0081 0.0003

Mercury -51339-05-03 11:45 J -17030024.16 -17030024.01 -17030023.87 0.0081 0.0006

Moon -51339-07-28 04:18 J -17029938.43 -17029938.32 -17029938.20 0.0081 0.0073

Earth -51339-07-28 05:16 J -17029938.31 -17029938.28 -17029938.17 0.0081 0.0078 \*

Mercury -51339-07-30 13:11 J -17029936.09 -17029935.95 -17029935.81 0.0080 0.0014

Mercury -51339-10-26 14:37 J -17029848.03 -17029847.89 -17029847.75 0.0080 0.0023

Mercury -51338-01-22 16:04 J -17029759.96 -17029759.83 -17029759.69 0.0080 0.0031

Mercury -51338-04-20 17:30 J -17029671.89 -17029671.77 -17029671.64 0.0080 0.0039

Mercury -51338-07-17 18:57 J -17029583.82 -17029583.71 -17029583.59 0.0080 0.0047

Earth -51338-07-30 10:47 J -17029571.14 -17029571.05 -17029570.90 0.0080 0.0071

Moon -51338-07-30 13:40 J -17029571.04 -17029570.93 -17029570.77 0.0080 0.0067 \*

Mercury -51338-10-13 20:23 J -17029495.75 -17029495.65 -17029495.54 0.0080 0.0055

Mercury -51337-01-09 21:49 J -17029407.67 -17029407.59 -17029407.50 0.0080 0.0063

Mercury -51337-04-06 23:16 J -17029319.59 -17029319.53 -17029319.46 0.0080 0.0071

Mercury -51337-07-04 00:28 J -17029231.48 -17029231.48 -17029231.45 0.0079 0.0079

Venus -51332-05-05 19:25 J -17027464.85 -17027464.69 -17027464.50 0.0077 0.0045

Venus -51332-12-17 04:18 J -17027239.53 -17027239.32 -17027239.10 0.0076 0.0018

Mercury -51184-10-09 09:06 J -16973251.13 -16973251.12 -16973251.09 0.0062 0.0062

Mercury -51183-01-05 09:49 J -16973163.13 -16973163.09 -16973163.00 0.0062 0.0058

Mercury -51183-04-03 11:16 J -16973075.11 -16973075.03 -16973074.93 0.0063 0.0053

Mercury -51183-06-30 12:13 J -16972987.08 -16972986.99 -16972986.87 0.0063 0.0049

Mercury -51183-09-26 13:25 J -16972899.05 -16972898.94 -16972898.81 0.0063 0.0044

Mercury -51183-12-23 14:23 J -16972811.02 -16972810.90 -16972810.75 0.0063 0.0040

Mercury -51182-03-21 15:35 J -16972722.98 -16972722.85 -16972722.70 0.0063 0.0035

Mercury -51182-06-17 16:47 J -16972634.94 -16972634.80 -16972634.64 0.0063 0.0030

Mercury -51182-09-13 17:45 J -16972546.90 -16972546.76 -16972546.59 0.0063 0.0026

Mercury -51182-12-10 18:57 J -16972458.86 -16972458.71 -16972458.54 0.0063 0.0021

Mercury -51181-03-07 20:09 J -16972370.82 -16972370.66 -16972370.49 0.0063 0.0017

Mercury -51181-06-03 21:21 J -16972282.77 -16972282.61 -16972282.43 0.0063 0.0012

Mercury -51181-08-30 22:33 J -16972194.73 -16972194.56 -16972194.38 0.0063 0.0007

Mercury -51181-11-26 23:45 J -16972106.68 -16972106.51 -16972106.33 0.0063 0.0002  
 Mercury -51180-02-23 00:57 J -16972018.63 -16972018.46 -16972018.28 0.0063 0.0003  
 Mercury -51180-05-22 02:09 J -16971930.58 -16971930.41 -16971930.24 0.0064 0.0008  
 Mercury -51180-08-18 03:21 J -16971842.53 -16971842.36 -16971842.19 0.0064 0.0013  
 Mercury -51180-11-14 04:33 J -16971754.47 -16971754.31 -16971754.14 0.0064 0.0018  
 Moon -51179-01-24 13:11 J -16971683.17 -16971682.95 -16971682.71 0.0064 0.0027  
 Earth -51179-01-24 15:49 J -16971683.07 -16971682.84 -16971682.60 0.0064 0.0025 \*  
 Mercury -51179-02-10 05:30 J -16971666.42 -16971666.27 -16971666.09 0.0064 0.0023  
 Mercury -51179-05-09 06:42 J -16971578.36 -16971578.22 -16971578.05 0.0064 0.0028  
 Mercury -51179-08-05 07:54 J -16971490.30 -16971490.17 -16971490.00 0.0064 0.0033  
 Mercury -51179-11-01 09:06 J -16971402.24 -16971402.12 -16971401.96 0.0064 0.0038  
 Earth -51178-01-26 03:06 J -16971316.51 -16971316.37 -16971316.17 0.0064 0.0049  
 Moon -51178-01-26 04:33 J -16971316.45 -16971316.31 -16971316.12 0.0064 0.0050 \*  
 Mercury -51178-01-28 10:18 J -16971314.18 -16971314.07 -16971313.92 0.0064 0.0044  
 Mercury -51178-04-26 11:45 J -16971226.11 -16971226.01 -16971225.88 0.0064 0.0048  
 Mercury -51178-07-23 12:57 J -16971138.04 -16971137.96 -16971137.85 0.0064 0.0054  
 Mercury -51178-10-19 14:23 J -16971049.96 -16971049.90 -16971049.82 0.0064 0.0059  
 Mercury -51177-01-15 15:35 J -16970961.86 -16970961.85 -16970961.81 0.0064 0.0064  
 Venus -51170-06-08 17:59 J -16968260.93 -16968260.75 -16968260.53 0.0067 0.0029  
 Venus -51169-01-19 23:30 J -16968035.72 -16968035.52 -16968035.29 0.0068 0.0016  
 Venus -51169-09-01 05:01 J -16967810.38 -16967810.29 -16967810.18 0.0068 0.0060  
 Mercury -51093-03-28 06:57 J -16940208.27 -16940208.21 -16940208.15 0.0082 0.0073  
 Mercury -51093-06-24 08:37 J -16940120.23 -16940120.14 -16940120.05 0.0082 0.0064  
 Mercury -51093-09-20 09:49 J -16940032.18 -16940032.09 -16940031.97 0.0082 0.0056  
 Mercury -51093-12-17 11:30 J -16939944.13 -16939944.02 -16939943.89 0.0081 0.0046  
 Mercury -51092-03-15 13:11 J -16939856.07 -16939855.95 -16939855.81 0.0081 0.0037  
 Mercury -51092-06-11 14:52 J -16939768.02 -16939767.88 -16939767.74 0.0081 0.0029  
 Mercury -51092-09-07 16:18 J -16939679.95 -16939679.82 -16939679.67 0.0081 0.0020  
 Mercury -51092-12-04 17:59 J -16939591.89 -16939591.75 -16939591.60 0.0081 0.0011  
 Mercury -51091-03-02 19:25 J -16939503.83 -16939503.69 -16939503.54 0.0081 0.0004

Mercury -51091-05-29 21:06 J -16939415.77 -16939415.62 -16939415.48 0.0081 0.0006  
 Earth -51091-07-29 21:06 J -16939354.67 -16939354.62 -16939354.55 0.0080 0.0078  
 Moon -51091-07-29 23:01 J -16939354.61 -16939354.54 -16939354.44 0.0080 0.0076 \*  
 Mercury -51091-08-25 22:33 J -16939327.70 -16939327.56 -16939327.42 0.0080 0.0014  
 Mars -51091-11-07 15:49 J -16939254.17 -16939253.84 -16939253.51 0.0080 0.0003  
 Mercury -51091-11-21 23:59 J -16939239.64 -16939239.50 -16939239.36 0.0080 0.0023  
 Mercury -51090-02-18 01:11 J -16939151.57 -16939151.45 -16939151.30 0.0080 0.0032  
 Mercury -51090-05-17 02:52 J -16939063.50 -16939063.38 -16939063.25 0.0080 0.0039  
 Moon -51090-07-31 22:47 J -16938987.66 -16938987.55 -16938987.37 0.0080 0.0067  
 Earth -51090-08-01 02:37 J -16938987.51 -16938987.39 -16938987.26 0.0080 0.0069 \*  
 Mercury -51090-08-13 04:18 J -16938975.43 -16938975.32 -16938975.20 0.0080 0.0047  
 Mercury -51090-11-09 05:45 J -16938887.36 -16938887.26 -16938887.15 0.0080 0.0055  
 Mercury -51089-02-05 07:11 J -16938799.28 -16938799.20 -16938799.11 0.0080 0.0063  
 Mercury -51089-05-03 08:23 J -16938711.20 -16938711.15 -16938711.07 0.0079 0.0071  
 Mercury -51089-07-30 09:49 J -16938623.10 -16938623.09 -16938623.06 0.0079 0.0078  
 Venus -51084-04-08 04:04 J -16936910.49 -16936910.33 -16936910.13 0.0077 0.0045  
 Venus -51084-11-19 13:11 J -16936685.16 -16936684.95 -16936684.73 0.0076 0.0019

# 51ST MILLENNIUM BCE

This is a list of transits visible from Pluto in the 51st millennium BCE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
	TRANSIT							
	TIME							
Mercury	-50935-01-31 18:28 J	-16882554.78	-16882554.73	-16882554.66	0.0062	0.0059		

Mercury -50935-04-29 19:11 J -16882466.76 -16882466.70 -16882466.59 0.0063 0.0055

Mercury -50935-07-26 20:37 J -16882378.73 -16882378.64 -16882378.53 0.0063 0.0050

Mercury -50935-10-22 21:21 J -16882290.70 -16882290.61 -16882290.47 0.0063 0.0046

Mercury -50934-01-18 22:47 J -16882202.67 -16882202.55 -16882202.41 0.0063 0.0041

Mercury -50934-04-16 23:59 J -16882114.63 -16882114.50 -16882114.35 0.0063 0.0036

Mercury -50934-07-14 00:57 J -16882026.59 -16882026.46 -16882026.30 0.0063 0.0032

Mercury -50934-10-10 02:09 J -16881938.55 -16881938.41 -16881938.24 0.0063 0.0027

Mercury -50933-01-06 03:21 J -16881850.51 -16881850.36 -16881850.19 0.0063 0.0023

Mercury -50933-04-03 04:47 J -16881762.47 -16881762.30 -16881762.14 0.0063 0.0018

Mercury -50933-06-30 05:45 J -16881674.42 -16881674.26 -16881674.09 0.0063 0.0013

Mercury -50933-09-26 06:57 J -16881586.38 -16881586.21 -16881586.04 0.0063 0.0008

Mercury -50933-12-23 08:09 J -16881498.33 -16881498.16 -16881497.99 0.0063 0.0003

Mercury -50932-03-21 09:21 J -16881410.28 -16881410.11 -16881409.94 0.0064 0.0002

Mercury -50932-06-17 10:33 J -16881322.23 -16881322.06 -16881321.89 0.0064 0.0006

Mars -50932-09-02 07:25 J -16881245.39 -16881245.19 -16881244.92 0.0064 0.0041

Mercury -50932-09-13 11:30 J -16881234.18 -16881234.02 -16881233.84 0.0064 0.0012

Mercury -50932-12-10 12:57 J -16881146.13 -16881145.96 -16881145.79 0.0064 0.0016

Earth -50931-01-26 06:13 J -16881099.46 -16881099.24 -16881098.99 0.0064 0.0028

Moon -50931-01-26 08:52 J -16881099.36 -16881099.13 -16881098.88 0.0064 0.0026 \*

Mercury -50931-03-08 14:09 J -16881058.07 -16881057.91 -16881057.75 0.0064 0.0021

Mercury -50931-06-04 15:21 J -16880970.01 -16880969.86 -16880969.70 0.0064 0.0026

Mercury -50931-08-31 16:33 J -16880881.96 -16880881.81 -16880881.65 0.0064 0.0031

Mercury -50931-11-27 17:45 J -16880793.90 -16880793.76 -16880793.61 0.0064 0.0036

Moon -50930-01-27 18:28 J -16880732.91 -16880732.73 -16880732.55 0.0064 0.0044

Earth -50930-01-27 18:13 J -16880732.90 -16880732.74 -16880732.54 0.0064 0.0046 \*

Mercury -50930-02-23 18:57 J -16880705.83 -16880705.71 -16880705.57 0.0064 0.0042

Mercury -50930-05-22 20:23 J -16880617.77 -16880617.65 -16880617.53 0.0064 0.0047

Mercury -50930-08-18 21:35 J -16880529.70 -16880529.60 -16880529.49 0.0064 0.0052

Mercury -50930-11-14 22:33 J -16880441.62 -16880441.56 -16880441.46 0.0064 0.0057

Mercury -50929-02-10 23:45 J -16880353.53 -16880353.51 -16880353.44 0.0065 0.0063

Venus -50922-05-12 03:06 J -16877706.56 -16877706.37 -16877706.15 0.0067 0.0027

Venus -50922-12-23 08:37 J -16877481.34 -16877481.14 -16877480.91 0.0068 0.0018

Venus -50921-08-04 13:54 J -16877255.99 -16877255.92 -16877255.81 0.0068 0.0062

Mercury -50845-01-26 14:52 J -16849687.89 -16849687.88 -16849687.87 0.0082 0.0081

Mercury -50845-04-23 16:33 J -16849599.88 -16849599.81 -16849599.74 0.0082 0.0072

Mercury -50845-07-20 18:13 J -16849511.84 -16849511.74 -16849511.65 0.0082 0.0063

Mercury -50845-10-16 19:25 J -16849423.79 -16849423.69 -16849423.57 0.0081 0.0055

Mercury -50844-01-12 21:06 J -16849335.73 -16849335.62 -16849335.49 0.0081 0.0045

Mercury -50844-04-10 22:47 J -16849247.67 -16849247.55 -16849247.41 0.0081 0.0036

Mercury -50844-07-08 00:28 J -16849159.62 -16849159.48 -16849159.34 0.0081 0.0027

Mercury -50844-10-04 01:54 J -16849071.56 -16849071.42 -16849071.27 0.0081 0.0019

Mercury -50844-12-31 03:35 J -16848983.50 -16848983.35 -16848983.20 0.0081 0.0010

Mercury -50843-03-29 05:01 J -16848895.43 -16848895.29 -16848895.14 0.0081 0.0003

Mercury -50843-06-25 06:42 J -16848807.37 -16848807.22 -16848807.08 0.0081 0.0007

Moon -50843-07-31 09:49 J -16848771.13 -16848771.09 -16848770.98 0.0080 0.0078

Earth -50843-07-31 12:57 J -16848771.03 -16848770.96 -16848770.84 0.0080 0.0075 \*

Mercury -50843-09-21 07:54 J -16848719.30 -16848719.17 -16848719.02 0.0080 0.0016

Mercury -50843-12-18 09:35 J -16848631.24 -16848631.10 -16848630.96 0.0080 0.0023

Mercury -50842-03-16 10:47 J -16848543.17 -16848543.05 -16848542.90 0.0080 0.0032

Mercury -50842-06-12 12:13 J -16848455.10 -16848454.99 -16848454.85 0.0080 0.0040

Earth -50842-08-02 18:42 J -16848403.82 -16848403.72 -16848403.60 0.0080 0.0072

Moon -50842-08-02 22:18 J -16848403.65 -16848403.57 -16848403.48 0.0080 0.0075 \*

Mercury -50842-09-08 13:40 J -16848367.03 -16848366.93 -16848366.80 0.0080 0.0048

Mercury -50842-12-05 15:06 J -16848278.96 -16848278.87 -16848278.76 0.0080 0.0056

Mercury -50841-03-02 16:33 J -16848190.88 -16848190.81 -16848190.71 0.0080 0.0064

Mercury -50841-05-29 17:59 J -16848102.80 -16848102.75 -16848102.68 0.0079 0.0072

Mercury -50841-08-25 19:25 J -16848014.69 -16848014.69 -16848014.68 0.0079 0.0079

Venus -50836-03-11 13:40 J -16846356.10 -16846355.93 -16846355.73 0.0077 0.0040

Venus -50836-10-22 22:47 J -16846130.76 -16846130.55 -16846130.34 0.0076 0.0024

Mercury -50687-02-27 03:21 J -16791946.40 -16791946.36 -16791946.28 0.0063 0.0059

Mercury -50687-05-26 04:47 J -16791858.38 -16791858.30 -16791858.21 0.0063 0.0054

Mercury -50687-08-22 05:30 J -16791770.35 -16791770.27 -16791770.15 0.0063 0.0050

Mercury -50687-11-18 06:57 J -16791682.32 -16791682.21 -16791682.08 0.0063 0.0045

Mercury -50686-02-14 07:40 J -16791594.29 -16791594.18 -16791594.03 0.0063 0.0041

Mercury -50686-05-13 09:06 J -16791506.25 -16791506.12 -16791505.97 0.0063 0.0036

Mercury -50686-08-09 10:18 J -16791418.21 -16791418.07 -16791417.91 0.0063 0.0031

Mercury -50686-11-05 11:16 J -16791330.17 -16791330.03 -16791329.86 0.0063 0.0027

Mercury -50685-02-01 12:28 J -16791242.13 -16791241.98 -16791241.81 0.0063 0.0022

Mercury -50685-04-29 13:40 J -16791154.09 -16791153.93 -16791153.76 0.0063 0.0018

Mercury -50685-07-26 14:52 J -16791066.04 -16791065.88 -16791065.70 0.0063 0.0013

Mercury -50685-10-22 16:18 J -16790977.99 -16790977.82 -16790977.65 0.0063 0.0008

Mercury -50684-01-18 17:16 J -16790889.95 -16790889.78 -16790889.60 0.0063 0.0003

Mercury -50684-04-16 18:28 J -16790801.90 -16790801.73 -16790801.55 0.0064 0.0002

Mercury -50684-07-13 19:40 J -16790713.85 -16790713.68 -16790713.51 0.0064 0.0007

Mercury -50684-10-09 20:52 J -16790625.80 -16790625.63 -16790625.46 0.0064 0.0012

Mars -50684-12-11 19:40 J -16790562.98 -16790562.68 -16790562.38 0.0064 0.0012

Mercury -50683-01-05 22:04 J -16790537.74 -16790537.58 -16790537.41 0.0064 0.0017

Moon -50683-01-27 23:01 J -16790515.77 -16790515.54 -16790515.29 0.0064 0.0021

Earth -50683-01-27 23:59 J -16790515.72 -16790515.50 -16790515.24 0.0064 0.0024 \*

Mercury -50683-04-03 23:01 J -16790449.69 -16790449.54 -16790449.36 0.0064 0.0022

Mercury -50683-07-01 00:13 J -16790361.63 -16790361.49 -16790361.32 0.0064 0.0027

Mercury -50683-09-27 01:25 J -16790273.57 -16790273.44 -16790273.27 0.0064 0.0032

Mercury -50683-12-24 02:37 J -16790185.51 -16790185.39 -16790185.23 0.0064 0.0037

Moon -50682-01-29 11:16 J -16790149.18 -16790149.03 -16790148.82 0.0064 0.0048

Earth -50682-01-29 11:59 J -16790149.14 -16790149.00 -16790148.82 0.0064 0.0051 \*

Mercury -50682-03-22 03:49 J -16790097.45 -16790097.34 -16790097.19 0.0064 0.0043

Mercury -50682-06-18 05:16 J -16790009.38 -16790009.28 -16790009.15 0.0064 0.0047

Mercury -50682-09-14 06:28 J -16789921.31 -16789921.23 -16789921.11 0.0064 0.0053

Mercury -50682-12-11 07:54 J -16789833.24 -16789833.17 -16789833.08 0.0065 0.0058

Mercury -50681-03-08 09:06 J -16789745.14 -16789745.12 -16789745.07 0.0065 0.0063

Venus -50675-09-01 08:37 J -16787377.21 -16787377.14 -16787377.04 0.0067 0.0062  
 Venus -50674-04-14 13:54 J -16787152.12 -16787151.92 -16787151.69 0.0067 0.0019  
 Venus -50674-11-25 19:25 J -16786926.88 -16786926.69 -16786926.47 0.0068 0.0026  
 Mercury -50597-02-22 00:28 J -16759079.50 -16759079.48 -16759079.43 0.0082 0.0079  
 Mercury -50597-05-20 02:09 J -16758991.47 -16758991.41 -16758991.32 0.0082 0.0070  
 Mercury -50597-08-16 03:49 J -16758903.42 -16758903.34 -16758903.23 0.0082 0.0061  
 Mercury -50597-11-12 05:30 J -16758815.37 -16758815.27 -16758815.15 0.0081 0.0052  
 Mercury -50596-02-08 07:11 J -16758727.32 -16758727.20 -16758727.07 0.0081 0.0043  
 Mercury -50596-05-07 08:37 J -16758639.26 -16758639.14 -16758639.00 0.0081 0.0034  
 Mercury -50596-08-03 10:18 J -16758551.20 -16758551.07 -16758550.92 0.0081 0.0025  
 Mercury -50596-10-30 11:59 J -16758463.14 -16758463.00 -16758462.85 0.0081 0.0016  
 Mercury -50595-01-26 13:25 J -16758375.08 -16758374.94 -16758374.79 0.0081 0.0008  
 Mercury -50595-04-24 15:06 J -16758287.02 -16758286.87 -16758286.73 0.0081 0.0001  
 Mercury -50595-07-21 16:33 J -16758198.95 -16758198.81 -16758198.66 0.0080 0.0009  
 Earth -50595-08-02 07:40 J -16758187.32 -16758187.18 -16758187.02 0.0080 0.0066  
 Moon -50595-08-02 10:33 J -16758187.17 -16758187.06 -16758186.91 0.0080 0.0070 \*  
 Mercury -50595-10-17 17:59 J -16758110.89 -16758110.75 -16758110.60 0.0080 0.0017  
 Mercury -50594-01-13 19:40 J -16758022.82 -16758022.68 -16758022.55 0.0080 0.0026  
 Mercury -50594-04-11 20:52 J -16757934.75 -16757934.63 -16757934.49 0.0080 0.0034  
 Mercury -50594-07-08 22:18 J -16757846.69 -16757846.57 -16757846.44 0.0080 0.0042  
 Mercury -50594-10-04 23:45 J -16757758.61 -16757758.51 -16757758.39 0.0080 0.0050  
 Mercury -50593-01-01 01:11 J -16757670.54 -16757670.45 -16757670.34 0.0080 0.0058  
 Mercury -50593-03-29 02:37 J -16757582.46 -16757582.39 -16757582.30 0.0079 0.0066  
 Mercury -50593-06-25 03:49 J -16757494.38 -16757494.34 -16757494.27 0.0079 0.0074  
 Venus -50588-02-12 00:28 J -16755801.67 -16755801.48 -16755801.27 0.0077 0.0032  
 Venus -50588-09-25 09:06 J -16755576.30 -16755576.12 -16755575.90 0.0076 0.0033  
 Mercury -50440-12-27 12:13 J -16701426.02 -16701425.99 -16701425.95 0.0063 0.0061  
 Mercury -50439-03-25 12:57 J -16701338.01 -16701337.96 -16701337.87 0.0063 0.0057  
 Mercury -50439-06-21 14:23 J -16701249.99 -16701249.90 -16701249.80 0.0063 0.0052  
 Mercury -50439-09-17 15:06 J -16701161.96 -16701161.87 -16701161.74 0.0063 0.0048



Mercury -50439-12-14 16:33 J -16701073.93 -16701073.81 -16701073.68 0.0063 0.0043

Mercury -50438-03-12 17:16 J -16700985.89 -16700985.78 -16700985.62 0.0063 0.0039

Mercury -50438-06-08 18:42 J -16700897.85 -16700897.72 -16700897.57 0.0063 0.0034

Mercury -50438-09-04 19:54 J -16700809.81 -16700809.67 -16700809.51 0.0063 0.0029

Mercury -50438-12-01 20:52 J -16700721.77 -16700721.63 -16700721.46 0.0063 0.0025

Mercury -50437-02-27 22:04 J -16700633.73 -16700633.58 -16700633.41 0.0063 0.0020

Mercury -50437-05-25 23:16 J -16700545.69 -16700545.53 -16700545.35 0.0063 0.0016

Mercury -50437-08-22 00:42 J -16700457.64 -16700457.47 -16700457.30 0.0063 0.0011

Mercury -50437-11-18 01:54 J -16700369.59 -16700369.42 -16700369.25 0.0064 0.0006

Mercury -50436-02-14 03:06 J -16700281.55 -16700281.37 -16700281.20 0.0064 0.0001

Mercury -50436-05-13 04:18 J -16700193.50 -16700193.32 -16700193.15 0.0064 0.0004

Mercury -50436-08-09 05:16 J -16700105.44 -16700105.28 -16700105.10 0.0064 0.0009

Mercury -50436-11-05 06:28 J -16700017.39 -16700017.23 -16700017.05 0.0064 0.0014

Earth -50435-01-29 20:09 J -16699931.92 -16699931.66 -16699931.41 0.0064 0.0014

Moon -50435-01-29 21:06 J -16699931.88 -16699931.62 -16699931.36 0.0064 0.0014 \*

Mercury -50435-02-01 07:40 J -16699929.34 -16699929.18 -16699929.01 0.0064 0.0019

Mercury -50435-04-30 08:52 J -16699841.28 -16699841.13 -16699840.96 0.0064 0.0024

Mercury -50435-07-27 10:04 J -16699753.22 -16699753.08 -16699752.92 0.0064 0.0029

Mercury -50435-10-23 11:16 J -16699665.17 -16699665.03 -16699664.87 0.0064 0.0034

Mercury -50434-01-19 12:28 J -16699577.10 -16699576.98 -16699576.83 0.0064 0.0039

Earth -50434-01-31 07:11 J -16699565.25 -16699565.20 -16699565.06 0.0064 0.0061

Moon -50434-01-31 09:21 J -16699565.19 -16699565.11 -16699565.03 0.0064 0.0061 \*

Mercury -50434-04-17 13:40 J -16699489.04 -16699488.93 -16699488.79 0.0064 0.0044

Mercury -50434-07-14 14:52 J -16699400.97 -16699400.88 -16699400.75 0.0064 0.0050

Mercury -50434-10-10 16:18 J -16699312.90 -16699312.82 -16699312.72 0.0065 0.0055

Mercury -50433-01-06 17:30 J -16699224.82 -16699224.77 -16699224.69 0.0065 0.0060

Venus -50427-08-04 20:52 J -16696822.76 -16696822.63 -16696822.45 0.0067 0.0048

Venus -50426-03-18 02:37 J -16696597.61 -16696597.39 -16696597.16 0.0067 0.0005

Venus -50426-10-29 07:54 J -16696372.33 -16696372.17 -16696371.98 0.0068 0.0040

Mercury -50350-12-22 10:04 J -16668559.08 -16668559.08 -16668559.05 0.0082 0.0081

Mercury -50349-03-19 11:45 J -16668471.07 -16668471.01 -16668470.93 0.0082 0.0072

Mercury -50349-06-15 13:40 J -16668383.02 -16668382.93 -16668382.84 0.0082 0.0063

Mercury -50349-09-11 14:52 J -16668294.97 -16668294.88 -16668294.75 0.0081 0.0055

Mercury -50349-12-08 16:33 J -16668206.92 -16668206.81 -16668206.68 0.0081 0.0046

Mercury -50348-03-06 18:13 J -16668118.86 -16668118.74 -16668118.60 0.0081 0.0037

Mercury -50348-06-02 19:40 J -16668030.80 -16668030.68 -16668030.53 0.0081 0.0028

Mercury -50348-08-29 21:35 J -16667942.74 -16667942.60 -16667942.46 0.0081 0.0019

Mercury -50348-11-25 23:01 J -16667854.68 -16667854.54 -16667854.39 0.0081 0.0010

Mercury -50347-02-22 00:42 J -16667766.62 -16667766.47 -16667766.33 0.0081 0.0003

Mercury -50347-05-21 02:09 J -16667678.56 -16667678.41 -16667678.27 0.0080 0.0007

Moon -50347-08-04 03:49 J -16667603.55 -16667603.34 -16667603.10 0.0080 0.0041

Earth -50347-08-04 07:11 J -16667603.40 -16667603.20 -16667602.95 0.0080 0.0042 \*

Mercury -50347-08-17 03:35 J -16667590.49 -16667590.35 -16667590.21 0.0080 0.0015

Mercury -50347-11-13 05:01 J -16667502.43 -16667502.29 -16667502.15 0.0080 0.0023

Mercury -50346-02-09 06:28 J -16667414.36 -16667414.23 -16667414.09 0.0080 0.0031

Mercury -50346-05-08 07:40 J -16667326.29 -16667326.18 -16667326.04 0.0080 0.0040

Mercury -50346-08-04 09:06 J -16667238.22 -16667238.12 -16667237.99 0.0080 0.0048

Mercury -50346-10-31 10:33 J -16667150.15 -16667150.06 -16667149.94 0.0080 0.0056

Mercury -50345-01-27 11:59 J -16667062.07 -16667062.00 -16667061.90 0.0080 0.0064

Mercury -50345-04-24 13:11 J -16666973.99 -16666973.95 -16666973.87 0.0079 0.0072

Mercury -50345-07-21 15:06 J -16666885.88 -16666885.87 -16666885.86 0.0079 0.0079

Venus -50341-06-04 04:47 J -16665472.31 -16665472.30 -16665472.24 0.0077 0.0076

Venus -50340-01-15 14:09 J -16665247.12 -16665246.91 -16665246.69 0.0077 0.0011

Venus -50340-08-28 22:33 J -16665021.70 -16665021.56 -16665021.39 0.0076 0.0053

Mercury -50192-10-26 21:49 J -16610905.61 -16610905.59 -16610905.54 0.0063 0.0061

Mercury -50191-01-22 22:47 J -16610817.60 -16610817.55 -16610817.46 0.0063 0.0057

Mercury -50191-04-20 23:59 J -16610729.58 -16610729.50 -16610729.39 0.0063 0.0052

Mercury -50191-07-18 00:57 J -16610641.55 -16610641.46 -16610641.33 0.0063 0.0048

Mercury -50191-10-14 02:09 J -16610553.52 -16610553.41 -16610553.27 0.0063 0.0043

Mercury -50190-01-10 03:35 J -16610465.48 -16610465.35 -16610465.21 0.0063 0.0038

Mercury -50190-04-08 04:18 J -16610377.44 -16610377.32 -16610377.16 0.0063 0.0035

Mercury -50190-07-05 05:45 J -16610289.41 -16610289.26 -16610289.10 0.0063 0.0029

Mercury -50190-10-01 06:57 J -16610201.36 -16610201.21 -16610201.05 0.0063 0.0025

Mercury -50190-12-28 07:54 J -16610113.32 -16610113.17 -16610113.00 0.0063 0.0020

Mercury -50189-03-25 09:06 J -16610025.28 -16610025.12 -16610024.94 0.0063 0.0016

Mercury -50189-06-21 10:18 J -16609937.23 -16609937.07 -16609936.89 0.0063 0.0011

Mercury -50189-09-17 11:45 J -16609849.18 -16609849.01 -16609848.84 0.0064 0.0006

Mercury -50189-12-14 12:57 J -16609761.13 -16609760.96 -16609760.79 0.0064 0.0001

Mercury -50188-03-12 14:09 J -16609673.08 -16609672.91 -16609672.74 0.0064 0.0004

Mercury -50188-06-08 15:06 J -16609585.03 -16609584.87 -16609584.69 0.0064 0.0009

Mercury -50188-09-04 16:18 J -16609496.98 -16609496.82 -16609496.64 0.0064 0.0014

Mercury -50188-12-01 17:30 J -16609408.93 -16609408.77 -16609408.60 0.0064 0.0019

Earth -50187-01-31 20:52 J -16609347.89 -16609347.63 -16609347.37 0.0064 0.0006

Moon -50187-01-31 20:52 J -16609347.88 -16609347.63 -16609347.38 0.0064 0.0003 \*

Mercury -50187-02-27 18:42 J -16609320.87 -16609320.72 -16609320.55 0.0064 0.0024

Mercury -50187-05-26 19:54 J -16609232.81 -16609232.67 -16609232.50 0.0064 0.0029

Mercury -50187-08-22 21:06 J -16609144.75 -16609144.62 -16609144.46 0.0064 0.0034

Mercury -50187-11-18 22:18 J -16609056.69 -16609056.57 -16609056.42 0.0064 0.0040

Mercury -50186-02-14 23:30 J -16608968.63 -16608968.52 -16608968.38 0.0064 0.0045

Mercury -50186-05-14 00:57 J -16608880.56 -16608880.46 -16608880.34 0.0065 0.0050

Mercury -50186-08-10 02:09 J -16608792.48 -16608792.41 -16608792.30 0.0065 0.0055

Mercury -50186-11-06 03:35 J -16608704.40 -16608704.35 -16608704.28 0.0065 0.0060

Venus -50180-11-25 07:11 J -16606493.21 -16606493.20 -16606493.13 0.0067 0.0067

Venus -50179-07-08 13:11 J -16606268.16 -16606267.95 -16606267.74 0.0067 0.0023

Venus -50178-02-18 18:13 J -16606042.94 -16606042.74 -16606042.52 0.0068 0.0021

Venus -50178-10-01 23:16 J -16605817.55 -16605817.53 -16605817.45 0.0068 0.0066

Mercury -50102-10-21 20:37 J -16578038.66 -16578038.64 -16578038.59 0.0082 0.0079

Mercury -50101-01-17 22:33 J -16577950.63 -16577950.56 -16577950.48 0.0082 0.0070

Mercury -50101-04-15 00:13 J -16577862.59 -16577862.49 -16577862.39 0.0081 0.0061

Mercury -50101-07-12 01:25 J -16577774.53 -16577774.44 -16577774.31 0.0081 0.0053

Mercury	-50101-10-08 03:21 J	-16577686.48	-16577686.36	-16577686.23	0.0081	0.0043
Mercury	-50100-01-04 05:01 J	-16577598.42	-16577598.29	-16577598.16	0.0081	0.0034
Mercury	-50100-04-02 06:28 J	-16577510.36	-16577510.23	-16577510.09	0.0081	0.0026
Mercury	-50100-06-29 08:09 J	-16577422.30	-16577422.16	-16577422.02	0.0081	0.0017
Mercury	-50100-09-25 09:35 J	-16577334.24	-16577334.10	-16577333.95	0.0081	0.0009
Mercury	-50100-12-22 11:16 J	-16577246.18	-16577246.03	-16577245.89	0.0080	0.0001
Mars	-50099-01-20 11:30 J	-16577217.35	-16577217.02	-16577216.68	0.0080	0.0007
Mercury	-50099-03-20 12:42 J	-16577158.12	-16577157.97	-16577157.82	0.0080	0.0008
Mercury	-50099-06-16 14:09 J	-16577070.05	-16577069.91	-16577069.77	0.0080	0.0017
Earth	-50099-08-06 12:57 J	-16577019.22	-16577018.96	-16577018.70	0.0080	0.0001
Moon	-50099-08-06 16:18 J	-16577019.08	-16577018.82	-16577018.56	0.0080	0.0005 *
Mercury	-50099-09-12 15:35 J	-16576981.98	-16576981.85	-16576981.71	0.0080	0.0025
Mercury	-50099-12-09 17:01 J	-16576893.92	-16576893.79	-16576893.65	0.0080	0.0033
Mercury	-50098-03-07 18:28 J	-16576805.85	-16576805.73	-16576805.60	0.0080	0.0041
Mercury	-50098-06-03 19:54 J	-16576717.78	-16576717.67	-16576717.55	0.0080	0.0049
Mercury	-50098-08-30 21:21 J	-16576629.71	-16576629.61	-16576629.51	0.0080	0.0057
Mercury	-50098-11-26 22:33 J	-16576541.63	-16576541.56	-16576541.46	0.0079	0.0065
Mercury	-50097-02-22 23:59 J	-16576453.54	-16576453.50	-16576453.43	0.0079	0.0072
Venus	-50093-05-07 21:49 J	-16574917.77	-16574917.59	-16574917.41	0.0077	0.0043
Venus	-50093-12-19 06:28 J	-16574692.43	-16574692.23	-16574692.01	0.0077	0.0021

# 50TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 50th millennium BCE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Mercury -49944-08-26 08:23 J -16520385.19 -16520385.15 -16520385.07 0.0063 0.0059  
Mercury -49944-11-22 09:35 J -16520297.17 -16520297.10 -16520297.00 0.0063 0.0054  
Mercury -49943-02-18 10:33 J -16520209.14 -16520209.06 -16520208.93 0.0063 0.0050  
Mercury -49943-05-17 11:45 J -16520121.11 -16520121.01 -16520120.87 0.0063 0.0045  
Mercury -49943-08-13 13:11 J -16520033.08 -16520032.95 -16520032.82 0.0063 0.0040  
Mercury -49943-11-09 13:54 J -16519945.04 -16519944.92 -16519944.76 0.0063 0.0037  
Mercury -49942-02-05 15:21 J -16519857.00 -16519856.86 -16519856.70 0.0063 0.0031  
Mercury -49942-05-04 16:33 J -16519768.96 -16519768.81 -16519768.65 0.0063 0.0027  
Mercury -49942-07-31 17:45 J -16519680.92 -16519680.76 -16519680.60 0.0063 0.0022  
Mercury -49942-10-27 18:42 J -16519592.87 -16519592.72 -16519592.54 0.0063 0.0018  
Mercury -49941-01-23 19:54 J -16519504.83 -16519504.67 -16519504.49 0.0064 0.0013  
Mercury -49941-04-20 21:21 J -16519416.78 -16519416.61 -16519416.44 0.0064 0.0008  
Mercury -49941-07-17 22:33 J -16519328.73 -16519328.56 -16519328.39 0.0064 0.0003  
Mercury -49941-10-13 23:45 J -16519240.68 -16519240.51 -16519240.34 0.0064 0.0002  
Mars -49941-11-18 18:57 J -16519204.97 -16519204.71 -16519204.41 0.0064 0.0021  
Mercury -49940-01-10 00:57 J -16519152.63 -16519152.46 -16519152.29 0.0064 0.0007  
Moon -49940-02-01 11:45 J -16519130.21 -16519130.01 -16519129.79 0.0064 0.0034  
Earth -49940-02-01 13:25 J -16519130.15 -16519129.94 -16519129.73 0.0064 0.0036 \*  
Mercury -49940-04-08 01:54 J -16519064.58 -16519064.42 -16519064.24 0.0064 0.0012  
Mercury -49940-07-05 03:06 J -16518976.53 -16518976.37 -16518976.19 0.0064 0.0017  
Mercury -49940-10-01 04:18 J -16518888.47 -16518888.32 -16518888.15 0.0064 0.0022  
Mercury -49940-12-28 05:30 J -16518800.41 -16518800.27 -16518800.10 0.0064 0.0027  
Moon -49939-02-03 00:42 J -16518763.67 -16518763.47 -16518763.22 0.0064 0.0036  
Earth -49939-02-03 00:57 J -16518763.65 -16518763.46 -16518763.23 0.0064 0.0038 \*  
Mercury -49939-03-26 06:42 J -16518712.35 -16518712.22 -16518712.05 0.0064 0.0033  
Mercury -49939-06-22 07:54 J -16518624.29 -16518624.17 -16518624.01 0.0064 0.0038  
Mercury -49939-09-18 09:21 J -16518536.23 -16518536.11 -16518535.97 0.0065 0.0043  
Mercury -49939-12-15 10:33 J -16518448.16 -16518448.06 -16518447.93 0.0065 0.0048

Mercury -49938-03-13 11:59 J -16518360.09 -16518360.00 -16518359.89 0.0065 0.0053

Mercury -49938-06-09 13:11 J -16518272.01 -16518271.95 -16518271.86 0.0065 0.0058

Mercury -49938-09-05 14:09 J -16518183.92 -16518183.91 -16518183.85 0.0065 0.0064

Venus -49932-10-29 01:54 J -16515938.60 -16515938.42 -16515938.21 0.0067 0.0031

Venus -49931-06-11 07:40 J -16515713.40 -16515713.18 -16515712.96 0.0068 0.0013

Venus -49930-01-22 12:28 J -16515488.07 -16515487.98 -16515487.83 0.0068 0.0058

Mercury -49854-05-25 07:25 J -16487606.21 -16487606.19 -16487606.13 0.0082 0.0079

Mercury -49854-08-21 09:06 J -16487518.18 -16487518.12 -16487518.02 0.0081 0.0070

Mercury -49854-11-17 11:01 J -16487430.13 -16487430.04 -16487429.93 0.0081 0.0060

Mercury -49853-02-13 12:42 J -16487342.08 -16487341.97 -16487341.85 0.0081 0.0051

Mercury -49853-05-11 14:23 J -16487254.02 -16487253.90 -16487253.77 0.0081 0.0043

Mercury -49853-08-07 15:49 J -16487165.97 -16487165.84 -16487165.70 0.0081 0.0034

Mercury -49853-11-03 17:30 J -16487077.91 -16487077.77 -16487077.63 0.0081 0.0025

Mercury -49852-01-30 19:11 J -16486989.85 -16486989.70 -16486989.56 0.0081 0.0017

Mercury -49852-04-28 20:37 J -16486901.78 -16486901.64 -16486901.49 0.0081 0.0008

Mercury -49852-07-25 22:18 J -16486813.72 -16486813.57 -16486813.43 0.0080 0.0002

Earth -49852-08-06 21:49 J -16486801.67 -16486801.59 -16486801.48 0.0080 0.0075

Moon -49852-08-07 00:57 J -16486801.51 -16486801.46 -16486801.39 0.0080 0.0078 \*

Mercury -49852-10-21 23:45 J -16486725.66 -16486725.51 -16486725.37 0.0080 0.0009

Mercury -49851-01-18 01:11 J -16486637.59 -16486637.45 -16486637.31 0.0080 0.0017

Mercury -49851-04-16 02:37 J -16486549.52 -16486549.39 -16486549.25 0.0080 0.0025

Mercury -49851-07-13 04:04 J -16486461.46 -16486461.33 -16486461.19 0.0080 0.0033

Moon -49851-08-08 23:30 J -16486434.59 -16486434.52 -16486434.40 0.0080 0.0074

Earth -49851-08-09 02:52 J -16486434.46 -16486434.38 -16486434.23 0.0080 0.0071 \*

Mercury -49851-10-09 05:30 J -16486373.39 -16486373.27 -16486373.14 0.0080 0.0041

Mercury -49850-01-05 06:57 J -16486285.32 -16486285.21 -16486285.09 0.0080 0.0049

Mercury -49850-04-03 08:23 J -16486197.25 -16486197.15 -16486197.05 0.0079 0.0057

Mercury -49850-06-30 09:49 J -16486109.17 -16486109.09 -16486109.00 0.0079 0.0065

Mercury -49850-09-26 11:01 J -16486021.08 -16486021.04 -16486020.97 0.0079 0.0072

Venus -49846-08-29 10:33 J -16484588.20 -16484588.06 -16484587.88 0.0077 0.0054

Venus -49845-04-10 19:54 J -16484362.89 -16484362.67 -16484362.45 0.0077 0.0011

Venus -49845-11-22 03:49 J -16484137.35 -16484137.34 -16484137.27 0.0076 0.0076

Mercury -49697-12-31 18:13 J -16430040.75 -16430040.74 -16430040.70 0.0063 0.0062

Mercury -49696-03-29 19:11 J -16429952.74 -16429952.70 -16429952.61 0.0063 0.0058

Mercury -49696-06-25 20:37 J -16429864.72 -16429864.64 -16429864.54 0.0063 0.0053

Mercury -49696-09-21 22:04 J -16429776.69 -16429776.58 -16429776.48 0.0063 0.0048

Mercury -49696-12-18 22:47 J -16429688.66 -16429688.55 -16429688.42 0.0063 0.0044

Mercury -49695-03-16 23:59 J -16429600.62 -16429600.50 -16429600.36 0.0063 0.0040

Mercury -49695-06-13 00:57 J -16429512.58 -16429512.46 -16429512.30 0.0063 0.0035

Mercury -49695-09-09 02:09 J -16429424.54 -16429424.41 -16429424.24 0.0063 0.0031

Mercury -49695-12-06 03:35 J -16429336.50 -16429336.35 -16429336.19 0.0063 0.0025

Mercury -49694-03-04 04:47 J -16429248.46 -16429248.30 -16429248.14 0.0063 0.0021

Mercury -49694-05-31 05:59 J -16429160.41 -16429160.25 -16429160.08 0.0064 0.0016

Mercury -49694-08-27 06:57 J -16429072.37 -16429072.21 -16429072.03 0.0064 0.0012

Mercury -49694-11-23 08:23 J -16428984.32 -16428984.15 -16428983.98 0.0064 0.0006

Mercury -49693-02-19 09:35 J -16428896.27 -16428896.10 -16428895.93 0.0064 0.0002

Mercury -49693-05-17 10:47 J -16428808.22 -16428808.05 -16428807.88 0.0064 0.0003

Mercury -49693-08-13 11:59 J -16428720.17 -16428720.00 -16428719.83 0.0064 0.0008

Mercury -49693-11-09 13:11 J -16428632.12 -16428631.95 -16428631.78 0.0064 0.0013

Earth -49692-02-03 23:01 J -16428545.80 -16428545.54 -16428545.28 0.0064 0.0005

Moon -49692-02-04 00:42 J -16428545.73 -16428545.47 -16428545.20 0.0064 0.0005 \*

Mercury -49692-02-05 14:23 J -16428544.06 -16428543.90 -16428543.73 0.0064 0.0018

Mercury -49692-05-04 15:21 J -16428456.01 -16428455.86 -16428455.69 0.0064 0.0024

Mercury -49692-07-31 16:33 J -16428367.95 -16428367.81 -16428367.64 0.0064 0.0029

Mercury -49692-10-27 17:59 J -16428279.89 -16428279.75 -16428279.59 0.0064 0.0033

Mercury -49691-01-23 19:11 J -16428191.83 -16428191.70 -16428191.55 0.0065 0.0039

Mercury -49691-04-21 20:23 J -16428103.76 -16428103.65 -16428103.51 0.0065 0.0044

Mercury -49691-07-18 21:49 J -16428015.69 -16428015.59 -16428015.47 0.0065 0.0049

Mercury -49691-10-14 23:01 J -16427927.62 -16427927.54 -16427927.43 0.0065 0.0054

Mercury -49690-01-10 23:59 J -16427839.54 -16427839.50 -16427839.41 0.0065 0.0060

Mercury -49690-04-09 01:40 J -16427751.43 -16427751.43 -16427751.41 0.0065 0.0065  
 Venus -49684-02-18 18:42 J -16425608.91 -16425608.72 -16425608.51 0.0067 0.0028  
 Venus -49684-10-02 00:13 J -16425383.70 -16425383.49 -16425383.27 0.0068 0.0016  
 Venus -49683-05-15 05:01 J -16425158.36 -16425158.29 -16425158.16 0.0068 0.0061  
 Mercury -49607-12-26 19:40 J -16397173.72 -16397173.68 -16397173.60 0.0081 0.0074  
 Mercury -49606-03-24 21:21 J -16397085.68 -16397085.61 -16397085.51 0.0081 0.0065  
 Mercury -49606-06-20 23:16 J -16396997.63 -16396997.53 -16396997.42 0.0081 0.0055  
 Mercury -49606-09-17 00:42 J -16396909.58 -16396909.47 -16396909.34 0.0081 0.0047  
 Mercury -49606-12-14 02:23 J -16396821.52 -16396821.40 -16396821.26 0.0081 0.0038  
 Mercury -49605-03-11 04:04 J -16396733.47 -16396733.33 -16396733.19 0.0081 0.0029  
 Mercury -49605-06-07 05:30 J -16396645.41 -16396645.27 -16396645.12 0.0081 0.0021  
 Mercury -49605-09-03 07:11 J -16396557.34 -16396557.20 -16396557.05 0.0081 0.0012  
 Mars -49605-09-17 22:18 J -16396542.84 -16396542.57 -16396542.26 0.0081 0.0042  
 Mercury -49605-11-30 08:37 J -16396469.28 -16396469.14 -16396468.99 0.0080 0.0004  
 Mercury -49604-02-26 10:18 J -16396381.22 -16396381.07 -16396380.93 0.0080 0.0005  
 Mercury -49604-05-25 11:45 J -16396293.15 -16396293.01 -16396292.87 0.0080 0.0013  
 Moon -49604-08-09 15:06 J -16396217.13 -16396216.87 -16396216.61 0.0080 0.0013  
 Earth -49604-08-09 18:13 J -16396216.99 -16396216.74 -16396216.47 0.0080 0.0013 \*  
 Mercury -49604-08-21 13:11 J -16396205.09 -16396204.95 -16396204.81 0.0080 0.0021  
 Mercury -49604-11-17 14:37 J -16396117.02 -16396116.89 -16396116.75 0.0080 0.0029  
 Mercury -49603-02-13 16:04 J -16396028.95 -16396028.83 -16396028.70 0.0080 0.0037  
 Mercury -49603-05-12 17:30 J -16395940.88 -16395940.77 -16395940.65 0.0080 0.0045  
 Mercury -49603-08-08 18:57 J -16395852.81 -16395852.71 -16395852.60 0.0079 0.0053  
 Mercury -49603-11-04 20:23 J -16395764.74 -16395764.65 -16395764.55 0.0079 0.0061  
 Mercury -49602-01-31 21:35 J -16395676.66 -16395676.60 -16395676.52 0.0079 0.0069  
 Mercury -49602-04-29 23:01 J -16395588.57 -16395588.54 -16395588.49 0.0079 0.0076  
 Venus -49599-12-20 03:06 J -16394258.53 -16394258.37 -16394258.21 0.0077 0.0052  
 Venus -49598-08-02 11:45 J -16394033.22 -16394033.01 -16394032.78 0.0077 0.0013  
 Mercury -49449-08-04 05:59 J -16339608.28 -16339608.25 -16339608.17 0.0063 0.0059  
 Mercury -49449-10-31 07:25 J -16339520.26 -16339520.19 -16339520.09 0.0063 0.0054



Mercury -49448-01-27 08:23 J -16339432.23 -16339432.15 -16339432.03 0.0063 0.0050

Mercury -49448-04-25 09:35 J -16339344.20 -16339344.10 -16339343.97 0.0063 0.0045

Mercury -49448-07-22 10:47 J -16339256.17 -16339256.05 -16339255.91 0.0063 0.0041

Mercury -49448-10-18 11:45 J -16339168.13 -16339168.01 -16339167.85 0.0063 0.0036

Mercury -49447-01-14 12:57 J -16339080.09 -16339079.96 -16339079.80 0.0063 0.0032

Mercury -49447-04-12 14:23 J -16338992.05 -16338991.90 -16338991.74 0.0064 0.0027

Mercury -49447-07-09 15:35 J -16338904.01 -16338903.85 -16338903.69 0.0064 0.0022

Mercury -49447-10-05 16:47 J -16338815.96 -16338815.80 -16338815.63 0.0064 0.0017

Mercury -49446-01-01 17:45 J -16338727.92 -16338727.76 -16338727.58 0.0064 0.0013

Mercury -49446-03-30 18:57 J -16338639.87 -16338639.71 -16338639.53 0.0064 0.0008

Mercury -49446-06-26 20:23 J -16338551.82 -16338551.65 -16338551.48 0.0064 0.0003

Mars -49446-07-20 10:18 J -16338528.29 -16338528.07 -16338527.81 0.0064 0.0038

Mercury -49446-09-22 21:35 J -16338463.77 -16338463.60 -16338463.43 0.0064 0.0002

Mercury -49446-12-19 22:47 J -16338375.72 -16338375.55 -16338375.38 0.0064 0.0007

Earth -49445-02-05 23:30 J -16338327.75 -16338327.52 -16338327.25 0.0064 0.0017

Moon -49445-02-06 02:52 J -16338327.63 -16338327.38 -16338327.11 0.0064 0.0014 \*

Mercury -49445-03-16 23:59 J -16338287.67 -16338287.50 -16338287.33 0.0064 0.0012

Mercury -49445-06-13 00:57 J -16338199.61 -16338199.46 -16338199.28 0.0064 0.0018

Mercury -49445-09-09 02:09 J -16338111.56 -16338111.41 -16338111.23 0.0064 0.0023

Mercury -49445-12-06 03:21 J -16338023.50 -16338023.36 -16338023.19 0.0064 0.0028

Moon -49444-02-06 10:47 J -16337961.15 -16337961.05 -16337960.89 0.0065 0.0055

Earth -49444-02-06 11:59 J -16337961.09 -16337961.00 -16337960.86 0.0065 0.0058 \*

Mercury -49444-03-04 04:47 J -16337935.44 -16337935.30 -16337935.14 0.0065 0.0032

Mercury -49444-05-31 05:59 J -16337847.38 -16337847.25 -16337847.10 0.0065 0.0038

Mercury -49444-08-27 07:11 J -16337759.31 -16337759.20 -16337759.06 0.0065 0.0043

Mercury -49444-11-23 08:37 J -16337671.25 -16337671.14 -16337671.02 0.0065 0.0048

Mercury -49443-02-19 09:49 J -16337583.17 -16337583.09 -16337582.98 0.0065 0.0053

Mercury -49443-05-18 10:47 J -16337495.10 -16337495.05 -16337494.95 0.0065 0.0059

Mercury -49443-08-14 12:13 J -16337407.00 -16337406.99 -16337406.94 0.0065 0.0064

Venus -49438-10-30 08:23 J -16335504.23 -16335504.15 -16335504.02 0.0067 0.0060

Venus -49437-06-11 14:09 J -16335279.12 -16335278.91 -16335278.69 0.0067 0.0016

Venus -49436-01-22 19:11 J -16335053.89 -16335053.70 -16335053.49 0.0068 0.0029

Mercury -49359-02-04 06:28 J -16306917.25 -16306917.23 -16306917.19 0.0082 0.0080

Mercury -49359-05-03 08:09 J -16306829.22 -16306829.16 -16306829.08 0.0081 0.0071

Mercury -49359-07-30 09:49 J -16306741.18 -16306741.09 -16306740.99 0.0081 0.0062

Mercury -49359-10-26 11:16 J -16306653.13 -16306653.03 -16306652.90 0.0081 0.0053

Mercury -49358-01-22 12:57 J -16306565.07 -16306564.96 -16306564.82 0.0081 0.0044

Mercury -49358-04-20 14:52 J -16306477.01 -16306476.88 -16306476.75 0.0081 0.0035

Mercury -49358-07-17 16:18 J -16306388.96 -16306388.82 -16306388.68 0.0081 0.0027

Mercury -49358-10-13 17:59 J -16306300.90 -16306300.75 -16306300.61 0.0081 0.0018

Mercury -49357-01-09 19:25 J -16306212.83 -16306212.69 -16306212.54 0.0080 0.0010

Mercury -49357-04-06 21:06 J -16306124.77 -16306124.62 -16306124.48 0.0080 0.0003

Mercury -49357-07-03 22:33 J -16306036.71 -16306036.56 -16306036.42 0.0080 0.0007

Moon -49357-08-10 15:35 J -16305999.09 -16305998.85 -16305998.58 0.0080 0.0022

Earth -49357-08-10 17:45 J -16305999.00 -16305998.76 -16305998.50 0.0080 0.0018 \*

Mercury -49357-09-29 23:59 J -16305948.64 -16305948.50 -16305948.36 0.0080 0.0015

Mercury -49357-12-27 01:25 J -16305860.58 -16305860.44 -16305860.30 0.0080 0.0023

Mercury -49356-03-25 02:37 J -16305772.51 -16305772.39 -16305772.24 0.0080 0.0032

Mercury -49356-06-21 04:04 J -16305684.44 -16305684.33 -16305684.19 0.0080 0.0040

Mercury -49356-09-17 05:30 J -16305596.37 -16305596.27 -16305596.14 0.0080 0.0048

Mercury -49356-12-14 06:57 J -16305508.30 -16305508.21 -16305508.09 0.0079 0.0055

Mercury -49355-03-12 08:37 J -16305420.22 -16305420.14 -16305420.05 0.0079 0.0063

Mercury -49355-06-08 10:04 J -16305332.14 -16305332.08 -16305332.01 0.0079 0.0070

Mercury -49355-09-04 11:16 J -16305244.04 -16305244.03 -16305244.00 0.0079 0.0078

Venus -49351-04-12 00:13 J -16303928.69 -16303928.49 -16303928.29 0.0077 0.0030

Venus -49351-11-23 08:52 J -16303703.32 -16303703.13 -16303702.92 0.0077 0.0035

Mercury -49202-09-13 17:01 J -16249351.80 -16249351.79 -16249351.74 0.0063 0.0062

Mercury -49202-12-10 18:28 J -16249263.79 -16249263.73 -16249263.66 0.0063 0.0057

Mercury -49201-03-07 19:11 J -16249175.77 -16249175.70 -16249175.59 0.0063 0.0053

Mercury -49201-06-03 20:23 J -16249087.74 -16249087.65 -16249087.53 0.0063 0.0049

Mercury -49201-08-30 21:49 J -16248999.71 -16248999.59 -16248999.47 0.0063 0.0044  
 Mercury -49201-11-26 22:33 J -16248911.67 -16248911.56 -16248911.41 0.0063 0.0040  
 Mercury -49200-02-22 23:45 J -16248823.64 -16248823.51 -16248823.35 0.0063 0.0035  
 Mercury -49200-05-22 01:11 J -16248735.60 -16248735.45 -16248735.30 0.0064 0.0030  
 Mercury -49200-08-18 02:23 J -16248647.56 -16248647.40 -16248647.24 0.0064 0.0025  
 Mercury -49200-11-14 03:21 J -16248559.51 -16248559.36 -16248559.19 0.0064 0.0021  
 Mars -49200-12-08 18:57 J -16248534.93 -16248534.71 -16248534.48 0.0064 0.0042  
 Mercury -49199-02-10 04:33 J -16248471.47 -16248471.31 -16248471.14 0.0064 0.0016  
 Mercury -49199-05-09 05:45 J -16248383.42 -16248383.26 -16248383.08 0.0064 0.0011  
 Mercury -49199-08-05 06:57 J -16248295.38 -16248295.21 -16248295.03 0.0064 0.0006  
 Mercury -49199-11-01 08:09 J -16248207.33 -16248207.16 -16248206.98 0.0064 0.0002  
 Mercury -49198-01-28 09:21 J -16248119.28 -16248119.11 -16248118.93 0.0064 0.0005  
 Earth -49198-02-07 04:47 J -16248109.51 -16248109.30 -16248109.05 0.0064 0.0029  
 Moon -49198-02-07 08:23 J -16248109.35 -16248109.15 -16248108.90 0.0064 0.0033 \*  
 Mercury -49198-04-26 10:33 J -16248031.22 -16248031.06 -16248030.88 0.0064 0.0009  
 Mercury -49198-07-23 11:45 J -16247943.17 -16247943.01 -16247942.83 0.0064 0.0014  
 Mercury -49198-10-19 13:11 J -16247855.11 -16247854.95 -16247854.79 0.0064 0.0019  
 Mercury -49197-01-15 14:23 J -16247767.06 -16247766.90 -16247766.74 0.0064 0.0024  
 Moon -49197-02-08 14:37 J -16247743.04 -16247742.89 -16247742.70 0.0064 0.0048  
 Earth -49197-02-08 17:01 J -16247742.94 -16247742.79 -16247742.57 0.0064 0.0046 \*  
 Mercury -49197-04-12 15:21 J -16247679.00 -16247678.86 -16247678.69 0.0065 0.0030  
 Mercury -49197-07-09 16:33 J -16247590.94 -16247590.81 -16247590.65 0.0065 0.0035  
 Mercury -49197-10-05 17:45 J -16247502.88 -16247502.76 -16247502.60 0.0065 0.0040  
 Mercury -49196-01-01 19:11 J -16247414.81 -16247414.70 -16247414.56 0.0065 0.0045  
 Mercury -49196-03-30 20:23 J -16247326.74 -16247326.65 -16247326.52 0.0065 0.0050  
 Mercury -49196-06-26 21:49 J -16247238.67 -16247238.59 -16247238.49 0.0065 0.0055  
 Mercury -49196-09-22 23:16 J -16247150.58 -16247150.53 -16247150.46 0.0065 0.0060  
 Jupiter -49195-04-25 21:35 J -16246936.11 -16246935.60 -16246934.99 0.0065 0.0020  
 Venus -49190-02-20 06:57 J -16245174.39 -16245174.21 -16245174.02 0.0067 0.0038  
 Venus -49190-10-03 12:13 J -16244949.21 -16244948.99 -16244948.77 0.0068 0.0006

Venus -49189-05-15 17:16 J -16244723.91 -16244723.78 -16244723.62 0.0068 0.0051

Mercury -49112-06-11 19:40 J -16216572.72 -16216572.68 -16216572.60 0.0081 0.0074

Mercury -49112-09-07 21:21 J -16216484.68 -16216484.61 -16216484.51 0.0081 0.0065

Mercury -49112-12-04 23:01 J -16216396.64 -16216396.54 -16216396.42 0.0081 0.0056

Mercury -49111-03-03 00:42 J -16216308.58 -16216308.47 -16216308.34 0.0081 0.0047

Mercury -49111-05-30 02:09 J -16216220.53 -16216220.41 -16216220.27 0.0081 0.0039

Mercury -49111-08-26 03:49 J -16216132.47 -16216132.34 -16216132.20 0.0081 0.0030

Mercury -49111-11-22 05:30 J -16216044.41 -16216044.27 -16216044.13 0.0081 0.0021

Mercury -49110-02-18 06:57 J -16215956.35 -16215956.21 -16215956.06 0.0080 0.0013

Mercury -49110-05-17 08:37 J -16215868.29 -16215868.14 -16215867.99 0.0080 0.0005

Moon -49110-08-12 21:06 J -16215780.84 -16215780.62 -16215780.35 0.0080 0.0035

Earth -49110-08-12 21:21 J -16215780.82 -16215780.61 -16215780.36 0.0080 0.0038 \*

Mercury -49110-08-13 10:04 J -16215780.22 -16215780.08 -16215779.93 0.0080 0.0004

Mercury -49110-11-09 11:30 J -16215692.16 -16215692.02 -16215691.87 0.0080 0.0012

Mercury -49109-02-05 12:57 J -16215604.10 -16215603.96 -16215603.81 0.0080 0.0020

Mercury -49109-05-03 14:37 J -16215516.03 -16215515.89 -16215515.76 0.0080 0.0028

Mercury -49109-07-30 15:49 J -16215427.96 -16215427.84 -16215427.70 0.0080 0.0036

Mercury -49109-10-26 17:16 J -16215339.89 -16215339.78 -16215339.65 0.0080 0.0044

Mercury -49108-01-22 18:57 J -16215251.82 -16215251.71 -16215251.60 0.0079 0.0052

Mercury -49108-04-20 20:09 J -16215163.75 -16215163.66 -16215163.56 0.0079 0.0060

Mercury -49108-07-17 21:35 J -16215075.67 -16215075.60 -16215075.52 0.0079 0.0067

Mercury -49108-10-13 22:47 J -16214987.58 -16214987.55 -16214987.49 0.0079 0.0075

Venus -49105-12-20 13:54 J -16213824.01 -16213823.92 -16213823.79 0.0077 0.0066

Venus -49104-08-02 23:16 J -16213598.75 -16213598.53 -16213598.30 0.0077 0.0002

Venus -49103-03-16 07:54 J -16213373.27 -16213373.17 -16213373.04 0.0077 0.0065

# 49TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 49th millennium BCE.**

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
	TRANSIT							
	TIME							
Mercury	-48955-10-23 05:01 J	-16159095.29	-16159095.29	-16159095.28	0.0063	0.0063		
Mercury	-48954-01-19 05:59 J	-16159007.30	-16159007.25	-16159007.18	0.0063	0.0059		
Mercury	-48954-04-17 06:57 J	-16158919.28	-16158919.21	-16158919.11	0.0063	0.0054		
Mercury	-48954-07-14 08:09 J	-16158831.25	-16158831.16	-16158831.04	0.0063	0.0050		
Mercury	-48954-10-10 09:06 J	-16158743.22	-16158743.12	-16158742.98	0.0063	0.0045		
Mercury	-48953-01-06 10:18 J	-16158655.18	-16158655.07	-16158654.92	0.0063	0.0041		
Mercury	-48953-04-03 11:30 J	-16158567.15	-16158567.02	-16158566.87	0.0064	0.0036		
Mercury	-48953-06-30 12:57 J	-16158479.11	-16158478.96	-16158478.81	0.0064	0.0031		
Mercury	-48953-09-26 13:40 J	-16158391.07	-16158390.93	-16158390.76	0.0064	0.0027		
Mercury	-48953-12-23 15:06 J	-16158303.02	-16158302.87	-16158302.70	0.0064	0.0022		
Mercury	-48952-03-21 16:18 J	-16158214.98	-16158214.82	-16158214.65	0.0064	0.0017		
Mercury	-48952-06-17 17:30 J	-16158126.93	-16158126.77	-16158126.60	0.0064	0.0012		
Mercury	-48952-09-13 18:42 J	-16158038.89	-16158038.72	-16158038.54	0.0064	0.0007		
Mercury	-48952-12-10 19:54 J	-16157950.84	-16157950.67	-16157950.49	0.0064	0.0003		
Earth	-48951-02-08 13:54 J	-16157891.13	-16157890.92	-16157890.68	0.0064	0.0034		
Moon	-48951-02-08 17:16 J	-16157890.99	-16157890.78	-16157890.55	0.0064	0.0033	*	
Mercury	-48951-03-08 21:06 J	-16157862.79	-16157862.62	-16157862.44	0.0064	0.0003		
Mercury	-48951-06-04 22:18 J	-16157774.74	-16157774.57	-16157774.39	0.0064	0.0008		
Mercury	-48951-08-31 23:45 J	-16157686.68	-16157686.51	-16157686.35	0.0064	0.0013		
Mercury	-48951-11-28 00:57 J	-16157598.63	-16157598.46	-16157598.30	0.0064	0.0018		
Moon	-48950-02-09 23:16 J	-16157524.73	-16157524.53	-16157524.33	0.0065	0.0040		
Earth	-48950-02-10 02:23 J	-16157524.59	-16157524.40	-16157524.19	0.0065	0.0041	*	

Mercury -48950-02-24 02:09 J -16157510.57 -16157510.41 -16157510.25 0.0065 0.0023  
 Mercury -48950-05-23 03:21 J -16157422.51 -16157422.36 -16157422.20 0.0065 0.0028  
 Mercury -48950-08-19 04:33 J -16157334.45 -16157334.31 -16157334.16 0.0065 0.0033  
 Mercury -48950-11-15 05:30 J -16157246.39 -16157246.27 -16157246.11 0.0065 0.0039  
 Mercury -48949-02-11 06:42 J -16157158.33 -16157158.22 -16157158.07 0.0065 0.0044  
 Mercury -48949-05-09 08:09 J -16157070.26 -16157070.16 -16157070.03 0.0065 0.0049  
 Mercury -48949-08-05 09:35 J -16156982.18 -16156982.10 -16156982.00 0.0065 0.0054  
 Mercury -48949-11-01 11:01 J -16156894.10 -16156894.04 -16156893.97 0.0065 0.0060  
 Mercury -48948-01-28 12:13 J -16156805.99 -16156805.99 -16156805.97 0.0065 0.0065  
 Venus -48944-10-31 01:40 J -16155069.56 -16155069.43 -16155069.27 0.0067 0.0051  
 Venus -48943-06-13 07:11 J -16154844.42 -16154844.20 -16154843.98 0.0067 0.0007  
 Venus -48942-01-24 11:59 J -16154619.16 -16154619.00 -16154618.79 0.0068 0.0038  
 Mercury -48865-04-24 07:11 J -16126404.21 -16126404.20 -16126404.16 0.0081 0.0080  
 Mercury -48865-07-21 08:52 J -16126316.19 -16126316.13 -16126316.05 0.0081 0.0071  
 Mercury -48865-10-17 10:33 J -16126228.14 -16126228.06 -16126227.96 0.0081 0.0062  
 Mercury -48864-01-13 12:13 J -16126140.09 -16126139.99 -16126139.87 0.0081 0.0053  
 Mercury -48864-04-11 13:40 J -16126052.04 -16126051.93 -16126051.80 0.0081 0.0045  
 Mercury -48864-07-08 15:21 J -16125963.99 -16125963.86 -16125963.72 0.0081 0.0036  
 Mercury -48864-10-04 16:47 J -16125875.93 -16125875.80 -16125875.65 0.0081 0.0028  
 Mars -48864-10-06 11:16 J -16125874.21 -16125874.03 -16125873.78 0.0081 0.0063  
 Mercury -48864-12-31 18:42 J -16125787.87 -16125787.72 -16125787.58 0.0081 0.0019  
 Mercury -48863-03-29 20:09 J -16125699.81 -16125699.66 -16125699.51 0.0080 0.0010  
 Mercury -48863-06-25 21:35 J -16125611.74 -16125611.60 -16125611.45 0.0080 0.0003  
 Earth -48863-08-14 09:06 J -16125562.35 -16125562.12 -16125561.88 0.0080 0.0034  
 Moon -48863-08-14 10:47 J -16125562.27 -16125562.05 -16125561.79 0.0080 0.0037 \*  
 Mercury -48863-09-21 23:01 J -16125523.68 -16125523.54 -16125523.39 0.0080 0.0007  
 Mercury -48863-12-19 00:42 J -16125435.62 -16125435.47 -16125435.33 0.0080 0.0014  
 Mercury -48862-03-17 01:54 J -16125347.55 -16125347.42 -16125347.27 0.0080 0.0023  
 Mercury -48862-06-13 03:21 J -16125259.48 -16125259.36 -16125259.22 0.0080 0.0031  
 Mercury -48862-09-09 04:47 J -16125171.42 -16125171.30 -16125171.16 0.0080 0.0039

Mercury -48862-12-06 06:13 J -16125083.35 -16125083.24 -16125083.11 0.0079 0.0047  
 Mercury -48861-03-03 07:40 J -16124995.28 -16124995.18 -16124995.07 0.0079 0.0054  
 Mercury -48861-05-30 08:52 J -16124907.20 -16124907.13 -16124907.02 0.0079 0.0063  
 Mercury -48861-08-26 10:47 J -16124819.12 -16124819.05 -16124818.99 0.0079 0.0069  
 Mercury -48861-11-22 11:45 J -16124731.02 -16124731.01 -16124730.97 0.0079 0.0077  
 Venus -48857-04-12 17:30 J -16123493.98 -16123493.77 -16123493.55 0.0077 0.0017  
 Venus -48857-11-24 02:37 J -16123268.56 -16123268.39 -16123268.22 0.0077 0.0048  
 Mercury -48708-12-01 17:45 J -16068838.79 -16068838.76 -16068838.72 0.0063 0.0061  
 Mercury -48707-02-27 18:28 J -16068750.78 -16068750.73 -16068750.64 0.0063 0.0057  
 Mercury -48707-05-26 19:40 J -16068662.76 -16068662.68 -16068662.57 0.0063 0.0053  
 Mercury -48707-08-22 20:37 J -16068574.73 -16068574.64 -16068574.51 0.0063 0.0049  
 Mercury -48707-11-18 21:49 J -16068486.69 -16068486.59 -16068486.45 0.0063 0.0044  
 Mercury -48706-02-14 23:16 J -16068398.66 -16068398.53 -16068398.39 0.0064 0.0039  
 Mercury -48706-05-14 00:28 J -16068310.62 -16068310.48 -16068310.33 0.0064 0.0034  
 Mercury -48706-08-10 01:25 J -16068222.58 -16068222.44 -16068222.28 0.0064 0.0030  
 Mercury -48706-11-06 02:37 J -16068134.54 -16068134.39 -16068134.22 0.0064 0.0025  
 Mercury -48705-02-02 03:49 J -16068046.49 -16068046.34 -16068046.17 0.0064 0.0020  
 Mercury -48705-04-30 05:01 J -16067958.45 -16067958.29 -16067958.12 0.0064 0.0015  
 Mercury -48705-07-27 06:28 J -16067870.40 -16067870.23 -16067870.06 0.0064 0.0010  
 Mercury -48705-10-23 07:40 J -16067782.35 -16067782.18 -16067782.01 0.0064 0.0005  
 Mercury -48704-01-19 08:52 J -16067694.30 -16067694.13 -16067693.96 0.0064 0.0001  
 Earth -48704-02-10 03:06 J -16067672.60 -16067672.37 -16067672.13 0.0064 0.0028  
 Moon -48704-02-10 04:33 J -16067672.53 -16067672.31 -16067672.07 0.0064 0.0027 \*  
 Mercury -48704-04-17 10:04 J -16067606.25 -16067606.08 -16067605.91 0.0064 0.0005  
 Mercury -48704-07-14 11:16 J -16067518.20 -16067518.03 -16067517.86 0.0064 0.0010  
 Mercury -48704-10-10 12:28 J -16067430.15 -16067429.98 -16067429.81 0.0065 0.0015  
 Mercury -48703-01-06 13:40 J -16067342.09 -16067341.93 -16067341.76 0.0065 0.0020  
 Moon -48703-02-11 12:13 J -16067306.16 -16067305.99 -16067305.78 0.0065 0.0045  
 Earth -48703-02-11 15:06 J -16067306.02 -16067305.87 -16067305.66 0.0065 0.0047 \*  
 Mercury -48703-04-04 14:52 J -16067254.03 -16067253.88 -16067253.72 0.0065 0.0025

Mercury -48703-07-01 16:04 J -16067165.98 -16067165.83 -16067165.67 0.0065 0.0030

Mercury -48703-09-27 17:16 J -16067077.91 -16067077.78 -16067077.63 0.0065 0.0035

Mercury -48703-12-24 18:42 J -16066989.85 -16066989.72 -16066989.58 0.0065 0.0040

Mercury -48702-03-22 19:40 J -16066901.79 -16066901.68 -16066901.54 0.0065 0.0046

Mercury -48702-06-18 20:52 J -16066813.72 -16066813.63 -16066813.50 0.0065 0.0051

Mercury -48702-09-14 22:18 J -16066725.64 -16066725.57 -16066725.47 0.0065 0.0057

Mercury -48702-12-11 23:45 J -16066637.55 -16066637.51 -16066637.45 0.0065 0.0062

Venus -48697-07-10 23:16 J -16064964.63 -16064964.53 -16064964.39 0.0067 0.0056

Venus -48696-02-21 04:47 J -16064739.51 -16064739.30 -16064739.08 0.0067 0.0012

Venus -48696-10-04 10:04 J -16064514.27 -16064514.08 -16064513.88 0.0068 0.0033

Mercury -48618-06-03 21:06 J -16036147.66 -16036147.62 -16036147.55 0.0081 0.0075

Mercury -48618-08-30 23:01 J -16036059.62 -16036059.54 -16036059.45 0.0081 0.0065

Mercury -48618-11-27 00:28 J -16035971.57 -16035971.48 -16035971.36 0.0081 0.0057

Mercury -48617-02-23 02:09 J -16035883.52 -16035883.41 -16035883.28 0.0081 0.0048

Mercury -48617-05-21 03:49 J -16035795.47 -16035795.34 -16035795.21 0.0081 0.0039

Mercury -48617-08-17 05:16 J -16035707.41 -16035707.28 -16035707.13 0.0081 0.0031

Mercury -48617-11-13 06:57 J -16035619.35 -16035619.21 -16035619.07 0.0080 0.0022

Mercury -48616-02-09 08:23 J -16035531.29 -16035531.15 -16035531.00 0.0080 0.0014

Mercury -48616-05-08 10:04 J -16035443.23 -16035443.08 -16035442.93 0.0080 0.0005

Mercury -48616-08-04 11:30 J -16035355.16 -16035355.02 -16035354.87 0.0080 0.0003

Earth -48616-08-16 00:13 J -16035343.72 -16035343.49 -16035343.22 0.0080 0.0019

Moon -48616-08-16 03:49 J -16035343.58 -16035343.34 -16035343.07 0.0080 0.0020 \*

Mercury -48616-10-31 12:57 J -16035267.10 -16035266.96 -16035266.81 0.0080 0.0011

Mercury -48615-01-27 14:37 J -16035179.04 -16035178.89 -16035178.75 0.0080 0.0019

Mercury -48615-04-25 15:49 J -16035090.97 -16035090.84 -16035090.70 0.0080 0.0027

Mercury -48615-07-22 17:16 J -16035002.90 -16035002.78 -16035002.64 0.0080 0.0035

Mercury -48615-10-18 18:42 J -16034914.83 -16034914.72 -16034914.59 0.0079 0.0043

Mercury -48614-01-14 20:23 J -16034826.76 -16034826.65 -16034826.54 0.0079 0.0051

Mercury -48614-04-12 21:35 J -16034738.69 -16034738.60 -16034738.50 0.0079 0.0059

Mercury -48614-07-09 22:47 J -16034650.61 -16034650.55 -16034650.46 0.0079 0.0066



Mercury -48614-10-06 00:13 J -16034562.53 -16034562.49 -16034562.43 0.0079 0.0074

Venus -48611-12-22 14:09 J -16033389.11 -16033388.91 -16033388.70 0.0077 0.0026

Venus -48610-08-04 22:47 J -16033163.72 -16033163.55 -16033163.34 0.0077 0.0040

Mercury -48461-10-14 05:59 J -15978670.26 -15978670.25 -15978670.22 0.0063 0.0063

Mercury -48460-01-10 06:42 J -15978582.26 -15978582.22 -15978582.13 0.0063 0.0059

Mercury -48460-04-08 08:09 J -15978494.24 -15978494.16 -15978494.06 0.0063 0.0054

Mercury -48460-07-05 08:52 J -15978406.21 -15978406.13 -15978406.00 0.0063 0.0050

Mercury -48460-10-01 10:18 J -15978318.18 -15978318.07 -15978317.94 0.0064 0.0045

Mercury -48460-12-28 11:30 J -15978230.14 -15978230.02 -15978229.88 0.0064 0.0040

Mercury -48459-03-26 12:57 J -15978142.10 -15978141.96 -15978141.82 0.0064 0.0035

Mercury -48459-06-22 13:40 J -15978054.06 -15978053.93 -15978053.76 0.0064 0.0031

Mercury -48459-09-18 14:52 J -15977966.02 -15977965.88 -15977965.71 0.0064 0.0026

Mercury -48459-12-15 16:18 J -15977877.98 -15977877.82 -15977877.65 0.0064 0.0021

Mars -48459-12-30 23:30 J -15977862.77 -15977862.52 -15977862.22 0.0064 0.0026

Mercury -48458-03-13 17:30 J -15977789.93 -15977789.77 -15977789.60 0.0064 0.0016

Mercury -48458-06-09 18:42 J -15977701.88 -15977701.72 -15977701.55 0.0064 0.0011

Mercury -48458-09-05 19:54 J -15977613.84 -15977613.67 -15977613.50 0.0064 0.0007

Mercury -48458-12-02 21:06 J -15977525.79 -15977525.62 -15977525.44 0.0064 0.0002

Moon -48457-02-12 17:59 J -15977453.98 -15977453.75 -15977453.50 0.0064 0.0018

Earth -48457-02-12 18:57 J -15977453.95 -15977453.71 -15977453.45 0.0064 0.0015 \*

Mercury -48457-02-28 22:33 J -15977437.74 -15977437.56 -15977437.39 0.0064 0.0004

Mercury -48457-05-26 23:30 J -15977349.68 -15977349.52 -15977349.34 0.0064 0.0009

Mercury -48457-08-23 00:42 J -15977261.63 -15977261.47 -15977261.29 0.0065 0.0014

Mercury -48457-11-19 01:54 J -15977173.57 -15977173.42 -15977173.24 0.0065 0.0019

Moon -48456-02-13 06:13 J -15977087.28 -15977087.24 -15977087.17 0.0065 0.0063

Earth -48456-02-13 07:25 J -15977087.27 -15977087.19 -15977087.08 0.0065 0.0060 \*

Mercury -48456-02-15 03:06 J -15977085.52 -15977085.37 -15977085.20 0.0065 0.0024

Mercury -48456-05-14 04:33 J -15976997.46 -15976997.31 -15976997.15 0.0065 0.0029

Mercury -48456-08-10 05:45 J -15976909.40 -15976909.26 -15976909.10 0.0065 0.0034

Mercury -48456-11-06 06:57 J -15976821.33 -15976821.21 -15976821.06 0.0065 0.0039

Mercury -48455-02-02 08:23 J -15976733.27 -15976733.15 -15976733.02 0.0065 0.0045

Mercury -48455-05-01 09:21 J -15976645.20 -15976645.11 -15976644.98 0.0065 0.0050

Mercury -48455-07-28 10:47 J -15976557.12 -15976557.05 -15976556.94 0.0065 0.0055

Mercury -48455-10-24 12:13 J -15976469.04 -15976468.99 -15976468.92 0.0065 0.0061

Venus -48450-03-21 22:47 J -15974859.66 -15974859.55 -15974859.38 0.0067 0.0052

Venus -48450-11-02 04:47 J -15974634.52 -15974634.30 -15974634.08 0.0067 0.0008

Venus -48449-06-14 09:35 J -15974409.27 -15974409.10 -15974408.90 0.0068 0.0037

Mercury -48371-01-18 09:21 J -15946067.11 -15946067.11 -15946067.09 0.0081 0.0081

Mercury -48371-04-16 10:47 J -15945979.10 -15945979.05 -15945978.97 0.0081 0.0072

Mercury -48371-07-13 12:28 J -15945891.06 -15945890.98 -15945890.87 0.0081 0.0063

Mercury -48371-10-09 14:23 J -15945803.01 -15945802.90 -15945802.79 0.0081 0.0054

Mercury -48370-01-05 15:49 J -15945714.95 -15945714.84 -15945714.71 0.0081 0.0046

Mercury -48370-04-03 17:30 J -15945626.90 -15945626.77 -15945626.63 0.0081 0.0037

Mercury -48370-06-30 18:57 J -15945538.84 -15945538.71 -15945538.56 0.0081 0.0029

Mercury -48370-09-26 20:37 J -15945450.78 -15945450.64 -15945450.49 0.0080 0.0020

Mercury -48370-12-23 22:18 J -15945362.72 -15945362.57 -15945362.43 0.0080 0.0012

Mercury -48369-03-20 23:45 J -15945274.65 -15945274.51 -15945274.36 0.0080 0.0003

Mercury -48369-06-17 01:11 J -15945186.59 -15945186.45 -15945186.30 0.0080 0.0006

Earth -48369-08-17 22:47 J -15945124.80 -15945124.55 -15945124.29 0.0080 0.0018

Moon -48369-08-18 01:54 J -15945124.65 -15945124.42 -15945124.16 0.0080 0.0022 \*

Mercury -48369-09-13 02:52 J -15945098.53 -15945098.38 -15945098.24 0.0080 0.0013

Mercury -48369-12-10 04:18 J -15945010.46 -15945010.32 -15945010.18 0.0080 0.0021

Mercury -48368-03-08 05:30 J -15944922.40 -15944922.27 -15944922.12 0.0080 0.0030

Mercury -48368-06-04 06:57 J -15944834.33 -15944834.21 -15944834.07 0.0079 0.0037

Mercury -48368-08-31 08:23 J -15944746.26 -15944746.15 -15944746.02 0.0079 0.0045

Mercury -48368-11-27 10:04 J -15944658.19 -15944658.08 -15944657.97 0.0079 0.0053

Mercury -48367-02-23 11:16 J -15944570.12 -15944570.03 -15944569.93 0.0079 0.0060

Mercury -48367-05-22 12:28 J -15944482.04 -15944481.98 -15944481.89 0.0079 0.0068

Mercury -48367-08-18 13:54 J -15944393.95 -15944393.92 -15944393.87 0.0079 0.0076

Venus -48364-09-01 14:37 J -15943284.10 -15943283.89 -15943283.67 0.0077 0.0018

Venus -48363-04-14 23:16 J -15943058.68 -15943058.53 -15943058.34 0.0077 0.0048

Mercury -48214-08-27 19:11 J -15888501.72 -15888501.70 -15888501.63 0.0063 0.0061

Mercury -48214-11-23 20:23 J -15888413.71 -15888413.65 -15888413.56 0.0063 0.0057

Mercury -48213-02-19 21:50 J -15888325.68 -15888325.59 -15888325.49 0.0063 0.0052

Mercury -48213-05-17 22:33 J -15888237.65 -15888237.56 -15888237.43 0.0064 0.0048

Mercury -48213-08-13 23:59 J -15888149.61 -15888149.50 -15888149.36 0.0064 0.0043

Mercury -48213-11-10 01:11 J -15888061.58 -15888061.45 -15888061.31 0.0064 0.0038

Mercury -48212-02-06 02:38 J -15887973.54 -15887973.39 -15887973.25 0.0064 0.0033

Mercury -48212-05-05 03:21 J -15887885.50 -15887885.36 -15887885.19 0.0064 0.0029

Mars -48212-05-22 08:52 J -15887868.42 -15887868.13 -15887867.83 0.0064 0.0005

Mercury -48212-08-01 04:33 J -15887797.45 -15887797.31 -15887797.14 0.0064 0.0024

Mercury -48212-10-28 05:59 J -15887709.41 -15887709.25 -15887709.08 0.0064 0.0019

Mercury -48211-01-24 07:11 J -15887621.36 -15887621.20 -15887621.03 0.0064 0.0014

Earth -48211-02-13 03:06 J -15887601.39 -15887601.37 -15887601.33 0.0064 0.0064

Mercury -48211-04-22 08:23 J -15887533.32 -15887533.15 -15887532.98 0.0064 0.0009

Mercury -48211-07-19 09:35 J -15887445.27 -15887445.10 -15887444.93 0.0064 0.0005

Mercury -48211-10-15 10:47 J -15887357.22 -15887357.05 -15887356.87 0.0064 0.0002

Mercury -48210-01-11 11:59 J -15887269.17 -15887269.00 -15887268.82 0.0065 0.0006

Moon -48210-02-14 12:42 J -15887235.20 -15887234.97 -15887234.71 0.0065 0.0014

Earth -48210-02-14 15:50 J -15887235.09 -15887234.84 -15887234.58 0.0065 0.0010 \*

Mercury -48210-04-09 13:11 J -15887181.11 -15887180.95 -15887180.77 0.0065 0.0011

Mercury -48210-07-06 14:23 J -15887093.06 -15887092.90 -15887092.72 0.0065 0.0016

Mercury -48210-10-02 15:35 J -15887005.00 -15887004.85 -15887004.68 0.0065 0.0021

Mercury -48210-12-29 16:47 J -15886916.94 -15886916.80 -15886916.63 0.0065 0.0026

Mercury -48209-03-26 18:14 J -15886828.88 -15886828.74 -15886828.58 0.0065 0.0031

Mercury -48209-06-22 19:26 J -15886740.82 -15886740.69 -15886740.54 0.0065 0.0036

Mercury -48209-09-18 20:52 J -15886652.76 -15886652.63 -15886652.49 0.0065 0.0042

Mercury -48209-12-15 21:50 J -15886564.69 -15886564.59 -15886564.45 0.0065 0.0047

Mercury -48208-03-13 23:02 J -15886476.62 -15886476.54 -15886476.41 0.0065 0.0053

Mercury -48208-06-10 00:28 J -15886388.54 -15886388.48 -15886388.38 0.0065 0.0058

Mercury -48208-09-06 02:09 J -15886300.45 -15886300.41 -15886300.36 0.0066 0.0063

Venus -48204-11-30 02:09 J -15884754.58 -15884754.41 -15884754.21 0.0067 0.0038

Venus -48203-07-13 07:40 J -15884529.40 -15884529.18 -15884528.96 0.0067 0.0007

Venus -48202-02-23 12:14 J -15884304.10 -15884303.99 -15884303.82 0.0068 0.0052

Mercury -48125-12-01 00:14 J -15855898.54 -15855898.49 -15855898.43 0.0081 0.0075

Mercury -48124-02-27 01:40 J -15855810.50 -15855810.43 -15855810.33 0.0081 0.0066

Mercury -48124-05-26 03:21 J -15855722.45 -15855722.36 -15855722.25 0.0081 0.0057

Mercury -48124-08-22 05:02 J -15855634.40 -15855634.29 -15855634.17 0.0081 0.0048

Mercury -48124-11-18 06:28 J -15855546.35 -15855546.23 -15855546.09 0.0081 0.0040

Mercury -48123-02-14 08:09 J -15855458.29 -15855458.16 -15855458.02 0.0081 0.0031

Mercury -48123-05-13 09:50 J -15855370.23 -15855370.09 -15855369.95 0.0080 0.0023

Mercury -48123-08-09 11:16 J -15855282.17 -15855282.03 -15855281.88 0.0080 0.0014

Moon -48123-08-18 19:54 J -15855272.77 -15855272.67 -15855272.51 0.0080 0.0070

Earth -48123-08-18 19:54 J -15855272.74 -15855272.67 -15855272.55 0.0080 0.0075 \*

Mercury -48123-11-05 12:57 J -15855194.11 -15855193.96 -15855193.82 0.0080 0.0006

Mercury -48122-02-01 14:23 J -15855106.05 -15855105.90 -15855105.75 0.0080 0.0002

Mercury -48122-04-30 15:50 J -15855017.98 -15855017.84 -15855017.69 0.0080 0.0010

Mercury -48122-07-27 17:16 J -15854929.92 -15854929.78 -15854929.63 0.0080 0.0019

Earth -48122-08-21 01:26 J -15854905.57 -15854905.44 -15854905.30 0.0080 0.0068

Moon -48122-08-21 02:38 J -15854905.51 -15854905.39 -15854905.21 0.0080 0.0065 \*

Mercury -48122-10-23 18:42 J -15854841.85 -15854841.72 -15854841.58 0.0080 0.0027

Mercury -48121-01-19 20:09 J -15854753.78 -15854753.66 -15854753.52 0.0079 0.0034

Mercury -48121-04-16 21:35 J -15854665.72 -15854665.60 -15854665.47 0.0079 0.0042

Mercury -48121-07-13 22:47 J -15854577.65 -15854577.55 -15854577.42 0.0079 0.0051

Mercury -48121-10-10 00:28 J -15854489.57 -15854489.48 -15854489.38 0.0079 0.0058

Mercury -48120-01-06 01:54 J -15854401.50 -15854401.42 -15854401.34 0.0079 0.0065

Mercury -48120-04-04 03:06 J -15854313.41 -15854313.37 -15854313.30 0.0079 0.0073

Venus -48118-09-30 08:52 J -15853404.23 -15853404.13 -15853404.01 0.0077 0.0067

Venus -48117-05-12 18:14 J -15853178.96 -15853178.74 -15853178.52 0.0077 0.0001

Venus -48117-12-24 02:52 J -15852953.48 -15852953.38 -15852953.26 0.0077 0.0066

# 48TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 48th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-47967-04-13 08:23 J	-15798421.16	-15798421.15	-15798421.10	0.0063	0.0063		
Mercury	-47967-07-10 09:35 J	-15798333.15	-15798333.10	-15798333.02	0.0064	0.0058		
Mercury	-47967-10-06 11:02 J	-15798245.13	-15798245.04	-15798244.95	0.0064	0.0053		
Mercury	-47966-01-02 11:45 J	-15798157.10	-15798157.01	-15798156.88	0.0064	0.0049		
Mercury	-47966-03-31 12:57 J	-15798069.07	-15798068.96	-15798068.82	0.0064	0.0044		
Mercury	-47966-06-27 14:23 J	-15797981.03	-15797980.90	-15797980.76	0.0064	0.0039		
Mercury	-47966-09-23 15:35 J	-15797892.99	-15797892.85	-15797892.71	0.0064	0.0034		
Mars	-47966-10-12 23:30 J	-15797873.81	-15797873.52	-15797873.22	0.0064	0.0005		
Mercury	-47966-12-20 16:18 J	-15797804.95	-15797804.82	-15797804.65	0.0064	0.0031		
Mercury	-47965-03-17 17:45 J	-15797716.91	-15797716.76	-15797716.59	0.0064	0.0025		
Mercury	-47965-06-13 18:57 J	-15797628.86	-15797628.71	-15797628.54	0.0064	0.0020		
Mercury	-47965-09-09 20:09 J	-15797540.82	-15797540.66	-15797540.49	0.0064	0.0015		
Mercury	-47965-12-06 21:21 J	-15797452.77	-15797452.61	-15797452.43	0.0064	0.0011		
Earth	-47964-02-15 01:54 J	-15797382.62	-15797382.42	-15797382.18	0.0064	0.0034		
Moon	-47964-02-15 04:47 J	-15797382.51	-15797382.30	-15797382.06	0.0064	0.0031	*	
Mercury	-47964-03-04 22:47 J	-15797364.72	-15797364.55	-15797364.38	0.0064	0.0005		
Mercury	-47964-05-31 23:59 J	-15797276.67	-15797276.50	-15797276.33	0.0065	0.0001		
Mercury	-47964-08-28 01:11 J	-15797188.62	-15797188.45	-15797188.28	0.0065	0.0005		

Mercury -47964-11-24 02:23 J -15797100.57 -15797100.40 -15797100.23 0.0065 0.0010

Moon -47963-02-16 11:16 J -15797016.23 -15797016.03 -15797015.82 0.0065 0.0039

Earth -47963-02-16 14:52 J -15797016.07 -15797015.88 -15797015.67 0.0065 0.0041 \*

Mercury -47963-02-20 03:35 J -15797012.51 -15797012.35 -15797012.18 0.0065 0.0015

Mercury -47963-05-19 04:47 J -15796924.46 -15796924.30 -15796924.13 0.0065 0.0020

Mercury -47963-08-15 05:59 J -15796836.40 -15796836.25 -15796836.08 0.0065 0.0025

Mercury -47963-11-11 07:11 J -15796748.34 -15796748.20 -15796748.04 0.0065 0.0030

Mercury -47962-02-07 08:38 J -15796660.28 -15796660.14 -15796659.99 0.0065 0.0035

Mercury -47962-05-06 10:04 J -15796572.21 -15796572.08 -15796571.95 0.0065 0.0041

Mercury -47962-08-02 10:47 J -15796484.15 -15796484.05 -15796483.90 0.0065 0.0047

Mercury -47962-10-29 12:14 J -15796396.08 -15796395.99 -15796395.86 0.0065 0.0052

Mercury -47961-01-25 13:40 J -15796308.00 -15796307.93 -15796307.83 0.0065 0.0057

Mercury -47961-04-22 15:21 J -15796219.91 -15796219.86 -15796219.81 0.0066 0.0062

Venus -47958-12-29 01:40 J -15794874.51 -15794874.43 -15794874.31 0.0067 0.0060

Venus -47957-08-10 06:57 J -15794649.41 -15794649.21 -15794648.98 0.0067 0.0017

Venus -47956-03-23 11:59 J -15794424.18 -15794424.00 -15794423.78 0.0068 0.0029

Mercury -47878-07-18 14:52 J -15765817.94 -15765817.88 -15765817.82 0.0081 0.0072

Mercury -47878-10-14 16:04 J -15765729.90 -15765729.83 -15765729.72 0.0081 0.0064

Mercury -47877-01-10 17:45 J -15765641.85 -15765641.76 -15765641.64 0.0081 0.0055

Mercury -47877-04-07 19:40 J -15765553.80 -15765553.68 -15765553.56 0.0081 0.0046

Mercury -47877-07-04 21:06 J -15765465.75 -15765465.62 -15765465.48 0.0081 0.0038

Mercury -47877-09-30 22:33 J -15765377.69 -15765377.56 -15765377.41 0.0080 0.0030

Mercury -47877-12-28 00:14 J -15765289.63 -15765289.49 -15765289.34 0.0080 0.0021

Mercury -47876-03-26 01:54 J -15765201.57 -15765201.42 -15765201.28 0.0080 0.0012

Mercury -47876-06-22 03:21 J -15765113.51 -15765113.36 -15765113.21 0.0080 0.0004

Earth -47876-08-21 05:59 J -15765053.50 -15765053.25 -15765052.99 0.0080 0.0004

Moon -47876-08-21 08:38 J -15765053.41 -15765053.14 -15765052.88 0.0080 0.0007 \*

Mercury -47876-09-18 04:47 J -15765025.44 -15765025.30 -15765025.15 0.0080 0.0005

Mercury -47876-12-15 06:14 J -15764937.38 -15764937.24 -15764937.09 0.0080 0.0013

Mercury -47875-03-13 07:40 J -15764849.31 -15764849.18 -15764849.03 0.0080 0.0021

Mercury -47875-06-09 09:06 J -15764761.25 -15764761.12 -15764760.98 0.0079 0.0028  
 Mercury -47875-09-05 10:33 J -15764673.18 -15764673.06 -15764672.92 0.0079 0.0036  
 Mercury -47875-12-02 11:59 J -15764585.11 -15764585.00 -15764584.87 0.0079 0.0044  
 Mercury -47874-02-28 13:40 J -15764497.04 -15764496.93 -15764496.82 0.0079 0.0052  
 Mercury -47874-05-27 14:52 J -15764408.97 -15764408.88 -15764408.78 0.0079 0.0059  
 Mercury -47874-08-23 16:04 J -15764320.89 -15764320.83 -15764320.74 0.0079 0.0067  
 Mercury -47874-11-19 17:45 J -15764232.80 -15764232.76 -15764232.71 0.0079 0.0074  
 Venus -47871-06-10 15:50 J -15763299.03 -15763298.84 -15763298.63 0.0077 0.0033  
 Venus -47870-01-22 00:57 J -15763073.65 -15763073.46 -15763073.26 0.0077 0.0034  
 Mercury -47721-11-27 22:47 J -15708340.58 -15708340.55 -15708340.48 0.0064 0.0061  
 Mercury -47720-02-24 00:28 J -15708252.56 -15708252.48 -15708252.41 0.0064 0.0056  
 Mercury -47720-05-23 00:57 J -15708164.54 -15708164.46 -15708164.34 0.0064 0.0052  
 Mercury -47720-08-19 02:23 J -15708076.50 -15708076.40 -15708076.28 0.0064 0.0047  
 Mercury -47720-11-15 03:35 J -15707988.47 -15707988.35 -15707988.22 0.0064 0.0042  
 Mercury -47719-02-11 04:33 J -15707900.43 -15707900.31 -15707900.16 0.0064 0.0038  
 Mars -47719-03-04 20:23 J -15707878.95 -15707878.65 -15707878.36 0.0064 0.0002  
 Mercury -47719-05-10 05:45 J -15707812.39 -15707812.26 -15707812.10 0.0064 0.0033  
 Mercury -47719-08-06 06:57 J -15707724.35 -15707724.21 -15707724.05 0.0064 0.0028  
 Mercury -47719-11-02 08:09 J -15707636.31 -15707636.16 -15707635.99 0.0064 0.0024  
 Mercury -47718-01-29 09:21 J -15707548.26 -15707548.11 -15707547.94 0.0064 0.0019  
 Moon -47718-02-16 19:11 J -15707529.72 -15707529.70 -15707529.65 0.0064 0.0064  
 Mercury -47718-04-27 10:47 J -15707460.22 -15707460.05 -15707459.88 0.0064 0.0013  
 Mercury -47718-07-24 11:59 J -15707372.17 -15707372.00 -15707371.83 0.0064 0.0009  
 Mercury -47718-10-20 13:11 J -15707284.12 -15707283.95 -15707283.78 0.0065 0.0004  
 Mercury -47717-01-16 14:23 J -15707196.07 -15707195.90 -15707195.73 0.0065 0.0001  
 Earth -47717-02-18 06:14 J -15707163.48 -15707163.24 -15707162.97 0.0065 0.0009  
 Moon -47717-02-18 07:26 J -15707163.44 -15707163.19 -15707162.94 0.0065 0.0008 \*  
 Mercury -47717-04-13 15:35 J -15707108.02 -15707107.85 -15707107.68 0.0065 0.0007  
 Mercury -47717-07-10 16:47 J -15707019.96 -15707019.80 -15707019.63 0.0065 0.0012  
 Mercury -47717-10-06 17:59 J -15706931.91 -15706931.75 -15706931.58 0.0065 0.0017

Mercury -47716-01-02 19:11 J -15706843.85 -15706843.70 -15706843.53 0.0065 0.0022  
 Mercury -47716-03-31 20:23 J -15706755.80 -15706755.65 -15706755.48 0.0065 0.0027  
 Mercury -47716-06-27 21:35 J -15706667.73 -15706667.60 -15706667.44 0.0065 0.0033  
 Mercury -47716-09-23 23:02 J -15706579.67 -15706579.54 -15706579.39 0.0065 0.0038  
 Mercury -47716-12-21 00:28 J -15706491.61 -15706491.48 -15706491.35 0.0065 0.0043  
 Mercury -47715-03-19 01:26 J -15706403.54 -15706403.44 -15706403.31 0.0065 0.0049  
 Mercury -47715-06-15 02:52 J -15706315.47 -15706315.38 -15706315.27 0.0066 0.0054  
 Mercury -47715-09-11 04:18 J -15706227.38 -15706227.32 -15706227.24 0.0066 0.0059  
 Mercury -47715-12-08 05:16 J -15706139.29 -15706139.28 -15706139.22 0.0066 0.0065  
 Venus -47711-09-08 09:50 J -15704769.29 -15704769.09 -15704768.89 0.0067 0.0029  
 Venus -47710-04-21 14:52 J -15704544.09 -15704543.88 -15704543.66 0.0067 0.0016  
 Venus -47710-12-02 19:54 J -15704318.74 -15704318.67 -15704318.55 0.0068 0.0061  
 Mercury -47632-12-06 04:47 J -15675825.35 -15675825.30 -15675825.25 0.0081 0.0075  
 Mercury -47631-03-04 05:59 J -15675737.31 -15675737.25 -15675737.15 0.0081 0.0067  
 Mercury -47631-05-31 07:54 J -15675649.27 -15675649.17 -15675649.06 0.0081 0.0058  
 Mercury -47631-08-27 09:35 J -15675561.22 -15675561.10 -15675560.98 0.0081 0.0049  
 Mercury -47631-11-23 11:02 J -15675473.16 -15675473.04 -15675472.91 0.0081 0.0041  
 Mercury -47630-02-19 12:28 J -15675385.10 -15675384.98 -15675384.83 0.0080 0.0033  
 Mercury -47630-05-18 14:09 J -15675297.05 -15675296.91 -15675296.76 0.0080 0.0024  
 Mercury -47630-08-14 15:50 J -15675208.99 -15675208.84 -15675208.70 0.0080 0.0015  
 Moon -47630-08-22 11:59 J -15675201.15 -15675201.00 -15675200.83 0.0080 0.0064  
 Earth -47630-08-22 15:21 J -15675201.01 -15675200.86 -15675200.68 0.0080 0.0061 \*  
 Mercury -47630-11-10 17:16 J -15675120.93 -15675120.78 -15675120.63 0.0080 0.0007  
 Mercury -47629-02-06 18:42 J -15675032.86 -15675032.72 -15675032.57 0.0080 0.0003  
 Mercury -47629-05-04 20:09 J -15674944.80 -15674944.66 -15674944.51 0.0080 0.0010  
 Mercury -47629-07-31 21:35 J -15674856.74 -15674856.60 -15674856.45 0.0080 0.0018  
 Mercury -47629-10-27 23:02 J -15674768.67 -15674768.54 -15674768.39 0.0079 0.0026  
 Mercury -47628-01-24 00:28 J -15674680.60 -15674680.48 -15674680.34 0.0079 0.0033  
 Mercury -47628-04-22 01:54 J -15674592.54 -15674592.42 -15674592.29 0.0079 0.0041  
 Mercury -47628-07-19 03:21 J -15674504.47 -15674504.36 -15674504.24 0.0079 0.0049



Mercury -47628-10-15 05:02 J -15674416.39 -15674416.29 -15674416.19 0.0079 0.0056

Mercury -47627-01-11 06:14 J -15674328.32 -15674328.24 -15674328.15 0.0079 0.0064

Mercury -47627-04-09 07:26 J -15674240.24 -15674240.19 -15674240.12 0.0079 0.0072

Venus -47625-07-08 16:04 J -15673418.98 -15673418.83 -15673418.66 0.0077 0.0055

Venus -47624-02-19 01:11 J -15673193.66 -15673193.45 -15673193.22 0.0077 0.0013

Mercury -47474-04-18 12:28 J -15618347.99 -15618347.98 -15618347.94 0.0064 0.0063

Mercury -47474-07-15 13:54 J -15618259.99 -15618259.92 -15618259.85 0.0064 0.0058

Mercury -47474-10-11 14:38 J -15618171.96 -15618171.89 -15618171.78 0.0064 0.0054

Mercury -47473-01-07 15:50 J -15618083.93 -15618083.84 -15618083.72 0.0064 0.0049

Mercury -47473-04-04 17:16 J -15617995.90 -15617995.78 -15617995.66 0.0064 0.0044

Mercury -47473-07-01 17:59 J -15617907.86 -15617907.75 -15617907.60 0.0064 0.0040

Mars -47473-07-25 19:40 J -15617883.95 -15617883.68 -15617883.38 0.0064 0.0015

Mercury -47473-09-27 19:11 J -15617819.82 -15617819.70 -15617819.54 0.0064 0.0036

Mercury -47473-12-24 20:38 J -15617731.78 -15617731.64 -15617731.48 0.0064 0.0030

Mercury -47472-03-22 21:50 J -15617643.74 -15617643.59 -15617643.43 0.0064 0.0025

Mercury -47472-06-18 23:02 J -15617555.70 -15617555.54 -15617555.37 0.0064 0.0021

Mercury -47472-09-15 00:14 J -15617467.65 -15617467.49 -15617467.32 0.0064 0.0016

Mercury -47472-12-12 01:26 J -15617379.60 -15617379.44 -15617379.27 0.0065 0.0011

Earth -47471-02-18 23:16 J -15617310.77 -15617310.53 -15617310.28 0.0065 0.0021

Moon -47471-02-19 02:23 J -15617310.63 -15617310.40 -15617310.13 0.0065 0.0021 \*

Mercury -47471-03-10 02:52 J -15617291.55 -15617291.38 -15617291.21 0.0065 0.0006

Mercury -47471-06-06 04:04 J -15617203.50 -15617203.33 -15617203.16 0.0065 0.0001

Mercury -47471-09-02 05:16 J -15617115.45 -15617115.28 -15617115.11 0.0065 0.0004

Mercury -47471-11-29 06:28 J -15617027.40 -15617027.23 -15617027.06 0.0065 0.0009

Moon -47470-02-20 09:50 J -15616944.20 -15616944.09 -15616943.90 0.0065 0.0053

Earth -47470-02-20 11:45 J -15616944.13 -15616944.01 -15616943.85 0.0065 0.0054 \*

Mercury -47470-02-25 07:26 J -15616939.34 -15616939.19 -15616939.01 0.0065 0.0015

Mercury -47470-05-24 08:38 J -15616851.29 -15616851.14 -15616850.96 0.0065 0.0020

Mercury -47470-08-20 10:04 J -15616763.23 -15616763.08 -15616762.91 0.0065 0.0025

Mercury -47470-11-16 11:16 J -15616675.17 -15616675.03 -15616674.87 0.0065 0.0030

Mercury -47469-02-12 12:28 J -15616587.11 -15616586.98 -15616586.82 0.0065 0.0036

Mercury -47469-05-10 13:54 J -15616499.05 -15616498.92 -15616498.78 0.0065 0.0041

Mercury -47469-08-06 14:52 J -15616410.98 -15616410.88 -15616410.73 0.0066 0.0047

Mercury -47469-11-02 16:18 J -15616322.91 -15616322.82 -15616322.70 0.0066 0.0052

Mercury -47468-01-29 17:45 J -15616234.83 -15616234.76 -15616234.66 0.0066 0.0057

Mercury -47468-04-27 18:42 J -15616146.74 -15616146.72 -15616146.64 0.0066 0.0063

Venus -47465-10-06 12:42 J -15614889.13 -15614888.97 -15614888.77 0.0067 0.0038

Venus -47464-05-19 18:14 J -15614663.96 -15614663.74 -15614663.52 0.0067 0.0007

Venus -47464-12-30 23:16 J -15614438.65 -15614438.53 -15614438.37 0.0068 0.0052

Mercury -47385-04-25 19:40 J -15585832.74 -15585832.68 -15585832.63 0.0081 0.0074

Mercury -47385-07-22 20:52 J -15585744.70 -15585744.63 -15585744.53 0.0081 0.0066

Mercury -47385-10-18 22:47 J -15585656.65 -15585656.55 -15585656.44 0.0081 0.0057

Mercury -47384-01-15 00:14 J -15585568.60 -15585568.49 -15585568.36 0.0081 0.0049

Mercury -47384-04-13 01:54 J -15585480.54 -15585480.42 -15585480.29 0.0080 0.0040

Mercury -47384-07-10 03:35 J -15585392.49 -15585392.35 -15585392.21 0.0080 0.0031

Mercury -47384-10-06 05:02 J -15585304.43 -15585304.29 -15585304.14 0.0080 0.0023

Mercury -47383-01-02 06:28 J -15585216.37 -15585216.23 -15585216.08 0.0080 0.0015

Mercury -47383-03-31 08:09 J -15585128.31 -15585128.16 -15585128.01 0.0080 0.0007

Mercury -47383-06-27 09:35 J -15585040.24 -15585040.10 -15585039.95 0.0080 0.0002

Moon -47383-08-25 08:52 J -15584981.35 -15584981.13 -15584980.87 0.0080 0.0037

Earth -47383-08-25 10:04 J -15584981.29 -15584981.08 -15584980.83 0.0080 0.0037 \*

Mercury -47383-09-23 11:02 J -15584952.18 -15584952.04 -15584951.89 0.0080 0.0010

Mercury -47383-12-20 12:28 J -15584864.12 -15584863.98 -15584863.83 0.0080 0.0018

Mercury -47382-03-18 13:54 J -15584776.05 -15584775.92 -15584775.78 0.0079 0.0026

Mercury -47382-06-14 15:21 J -15584687.99 -15584687.86 -15584687.72 0.0079 0.0034

Mercury -47382-09-10 16:47 J -15584599.92 -15584599.80 -15584599.67 0.0079 0.0041

Mercury -47382-12-07 18:14 J -15584511.85 -15584511.74 -15584511.62 0.0079 0.0049

Mercury -47381-03-04 19:26 J -15584423.78 -15584423.69 -15584423.58 0.0079 0.0057

Mercury -47381-05-31 21:06 J -15584335.70 -15584335.62 -15584335.54 0.0079 0.0064

Mercury -47381-08-27 22:18 J -15584247.62 -15584247.57 -15584247.50 0.0079 0.0072

Venus -47379-08-06 18:57 J -15583538.81 -15583538.71 -15583538.58 0.0078 0.0066

Venus -47378-03-20 04:33 J -15583313.54 -15583313.31 -15583313.09 0.0077 0.0002

Venus -47378-10-31 12:42 J -15583088.04 -15583087.97 -15583087.84 0.0077 0.0069

Mercury -47228-09-06 02:38 J -15528355.40 -15528355.39 -15528355.34 0.0064 0.0063

Mercury -47228-12-03 04:04 J -15528267.39 -15528267.33 -15528267.26 0.0064 0.0058

Mercury -47227-03-01 04:47 J -15528179.37 -15528179.30 -15528179.19 0.0064 0.0054

Mercury -47227-05-28 05:59 J -15528091.34 -15528091.25 -15528091.12 0.0064 0.0049

Mercury -47227-08-24 07:26 J -15528003.30 -15528003.19 -15528003.06 0.0064 0.0044

Mercury -47227-11-20 08:38 J -15527915.27 -15527915.14 -15527915.00 0.0064 0.0040

Mars -47227-12-16 23:45 J -15527888.72 -15527888.51 -15527888.26 0.0064 0.0040

Mercury -47226-02-16 09:35 J -15527827.23 -15527827.10 -15527826.94 0.0064 0.0035

Mercury -47226-05-15 10:47 J -15527739.18 -15527739.05 -15527738.88 0.0064 0.0030

Mercury -47226-08-11 11:59 J -15527651.14 -15527651.00 -15527650.83 0.0064 0.0026

Mercury -47226-11-07 13:26 J -15527563.10 -15527562.94 -15527562.77 0.0064 0.0020

Mercury -47225-02-03 14:38 J -15527475.05 -15527474.89 -15527474.72 0.0065 0.0016

Moon -47225-02-20 16:47 J -15527457.99 -15527457.80 -15527457.57 0.0065 0.0040

Earth -47225-02-20 19:11 J -15527457.88 -15527457.70 -15527457.49 0.0065 0.0042 \*

Mercury -47225-05-01 15:50 J -15527387.00 -15527386.84 -15527386.67 0.0065 0.0011

Mercury -47225-07-28 17:02 J -15527298.95 -15527298.79 -15527298.61 0.0065 0.0006

Mercury -47225-10-24 18:28 J -15527210.90 -15527210.73 -15527210.56 0.0065 0.0001

Mercury -47224-01-20 19:40 J -15527122.85 -15527122.68 -15527122.51 0.0065 0.0005

Earth -47224-02-21 07:40 J -15527091.38 -15527091.18 -15527090.93 0.0065 0.0033

Moon -47224-02-21 11:30 J -15527091.23 -15527091.02 -15527090.78 0.0065 0.0030 \*

Mercury -47224-04-18 20:52 J -15527034.80 -15527034.63 -15527034.46 0.0065 0.0010

Mercury -47224-07-15 22:04 J -15526946.74 -15526946.58 -15526946.41 0.0065 0.0015

Mercury -47224-10-11 23:16 J -15526858.69 -15526858.53 -15526858.36 0.0065 0.0020

Mercury -47223-01-08 00:28 J -15526770.63 -15526770.48 -15526770.31 0.0065 0.0025

Mercury -47223-04-06 01:40 J -15526682.57 -15526682.43 -15526682.26 0.0065 0.0031

Mercury -47223-07-03 03:06 J -15526594.50 -15526594.37 -15526594.22 0.0065 0.0036

Mercury -47223-09-29 04:33 J -15526506.44 -15526506.31 -15526506.17 0.0066 0.0041

Mercury -47223-12-26 05:30 J -15526418.37 -15526418.27 -15526418.13 0.0066 0.0047

Mercury -47222-03-24 06:57 J -15526330.30 -15526330.21 -15526330.09 0.0066 0.0052

Mercury -47222-06-20 08:23 J -15526242.22 -15526242.15 -15526242.06 0.0066 0.0057

Mercury -47222-09-16 09:21 J -15526154.13 -15526154.11 -15526154.03 0.0066 0.0063

Venus -47219-11-04 18:42 J -15525008.89 -15525008.72 -15525008.53 0.0067 0.0038

Venus -47218-06-17 23:59 J -15524783.72 -15524783.50 -15524783.28 0.0067 0.0006

Venus -47217-01-29 05:02 J -15524558.42 -15524558.29 -15524558.13 0.0068 0.0051

Mercury -47139-06-18 09:06 J -15495928.12 -15495928.12 -15495928.08 0.0081 0.0080

Mercury -47139-09-14 11:02 J -15495840.10 -15495840.04 -15495839.97 0.0081 0.0071

Mercury -47139-12-11 12:28 J -15495752.06 -15495751.98 -15495751.88 0.0081 0.0063

Mercury -47138-03-09 14:09 J -15495664.01 -15495663.91 -15495663.79 0.0081 0.0054

Mercury -47138-06-05 15:35 J -15495575.96 -15495575.85 -15495575.72 0.0080 0.0046

Mercury -47138-09-01 17:16 J -15495487.90 -15495487.78 -15495487.64 0.0080 0.0037

Mercury -47138-11-28 18:57 J -15495399.84 -15495399.71 -15495399.57 0.0080 0.0028

Mercury -47137-02-24 20:23 J -15495311.79 -15495311.65 -15495311.50 0.0080 0.0020

Mercury -47137-05-22 22:04 J -15495223.73 -15495223.58 -15495223.43 0.0080 0.0012

Mercury -47137-08-18 23:30 J -15495135.66 -15495135.52 -15495135.37 0.0080 0.0004

Moon -47137-08-26 00:42 J -15495128.72 -15495128.47 -15495128.22 0.0080 0.0001

Earth -47137-08-26 03:50 J -15495128.60 -15495128.34 -15495128.08 0.0080 0.0003 \*

Mercury -47137-11-15 01:11 J -15495047.60 -15495047.45 -15495047.31 0.0080 0.0005

Mercury -47136-02-11 02:23 J -15494959.54 -15494959.40 -15494959.25 0.0080 0.0013

Mercury -47136-05-10 03:50 J -15494871.47 -15494871.34 -15494871.19 0.0079 0.0021

Mercury -47136-08-06 05:16 J -15494783.41 -15494783.28 -15494783.13 0.0079 0.0029

Mercury -47136-11-02 06:42 J -15494695.34 -15494695.22 -15494695.08 0.0079 0.0036

Mercury -47135-01-29 08:09 J -15494607.27 -15494607.16 -15494607.03 0.0079 0.0044

Mercury -47135-04-27 09:50 J -15494519.20 -15494519.09 -15494518.98 0.0079 0.0051

Mercury -47135-07-24 11:02 J -15494431.13 -15494431.04 -15494430.94 0.0079 0.0059

Mercury -47135-10-20 12:14 J -15494343.05 -15494342.99 -15494342.90 0.0079 0.0067

Mercury -47134-01-16 13:40 J -15494254.97 -15494254.93 -15494254.87 0.0078 0.0074

Venus -47133-09-03 23:45 J -15493658.58 -15493658.51 -15493658.39 0.0078 0.0070

Venus -47132-04-17 09:21 J -15493433.33 -15493433.11 -15493432.89 0.0077 0.0002

Venus -47132-11-28 18:14 J -15493207.85 -15493207.74 -15493207.62 0.0077 0.0065

# 47TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 47th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-46981-01-25 17:02 J	-15438362.80	-15438362.79	-15438362.75	0.0064	0.0063		
Mercury	-46981-04-22 17:59 J	-15438274.79	-15438274.75	-15438274.66	0.0064	0.0059		
Mercury	-46981-07-19 19:11 J	-15438186.77	-15438186.70	-15438186.59	0.0064	0.0054		
Mercury	-46981-10-15 20:23 J	-15438098.74	-15438098.65	-15438098.53	0.0064	0.0049		
Mercury	-46980-01-11 21:50 J	-15438010.71	-15438010.59	-15438010.47	0.0064	0.0044		
Mercury	-46980-04-09 22:33 J	-15437922.67	-15437922.56	-15437922.41	0.0064	0.0040		
Mars	-46980-05-09 02:09 J	-15437893.43	-15437893.41	-15437893.33	0.0064	0.0063		
Mercury	-46980-07-06 23:45 J	-15437834.63	-15437834.51	-15437834.35	0.0064	0.0036		
Mercury	-46980-10-03 01:11 J	-15437746.59	-15437746.45	-15437746.29	0.0064	0.0030		
Mercury	-46980-12-30 02:23 J	-15437658.55	-15437658.40	-15437658.24	0.0064	0.0025		
Moon	-46979-02-21 11:59 J	-15437605.05	-15437605.00	-15437604.90	0.0064	0.0062		
Earth	-46979-02-21 14:38 J	-15437604.91	-15437604.89	-15437604.85	0.0064	0.0064	*	
Mercury	-46979-03-28 03:35 J	-15437570.50	-15437570.35	-15437570.18	0.0065	0.0021		
Mercury	-46979-06-24 04:47 J	-15437482.46	-15437482.30	-15437482.13	0.0065	0.0016		
Mercury	-46979-09-20 06:14 J	-15437394.41	-15437394.24	-15437394.07	0.0065	0.0011		
Mercury	-46979-12-17 07:26 J	-15437306.36	-15437306.19	-15437306.02	0.0065	0.0006		

Moon -46978-02-23 03:35 J -15437238.61 -15437238.35 -15437238.07 0.0065 0.0007  
 Earth -46978-02-23 03:35 J -15437238.60 -15437238.35 -15437238.09 0.0065 0.0010 \*  
 Mercury -46978-03-15 08:38 J -15437218.31 -15437218.14 -15437217.97 0.0065 0.0001  
 Mercury -46978-06-11 09:50 J -15437130.26 -15437130.09 -15437129.91 0.0065 0.0005  
 Mercury -46978-09-07 11:02 J -15437042.20 -15437042.04 -15437041.86 0.0065 0.0010  
 Mercury -46978-12-04 12:28 J -15436954.15 -15436953.98 -15436953.81 0.0065 0.0015  
 Mercury -46977-03-01 13:26 J -15436866.09 -15436865.94 -15436865.76 0.0065 0.0020  
 Mercury -46977-05-28 14:38 J -15436778.03 -15436777.89 -15436777.72 0.0065 0.0026  
 Jupiter -46977-06-12 14:52 J -15436763.38 -15436762.88 -15436762.35 0.0065 0.0031  
 Mercury -46977-08-24 16:04 J -15436689.97 -15436689.83 -15436689.67 0.0065 0.0030  
 Mercury -46977-11-20 17:16 J -15436601.91 -15436601.78 -15436601.62 0.0065 0.0036  
 Mercury -46976-02-16 18:42 J -15436513.84 -15436513.72 -15436513.58 0.0066 0.0041  
 Mercury -46976-05-15 19:40 J -15436425.78 -15436425.68 -15436425.53 0.0066 0.0047  
 Mercury -46976-08-11 21:06 J -15436337.70 -15436337.62 -15436337.49 0.0066 0.0052  
 Mercury -46976-11-07 22:47 J -15436249.63 -15436249.55 -15436249.46 0.0066 0.0057  
 Mercury -46975-02-03 23:45 J -15436161.54 -15436161.51 -15436161.44 0.0066 0.0063  
 Venus -46973-12-03 00:14 J -15435128.66 -15435128.49 -15435128.31 0.0067 0.0041  
 Venus -46972-07-16 05:30 J -15434903.49 -15434903.27 -15434903.05 0.0067 0.0004  
 Venus -46971-02-26 10:18 J -15434678.21 -15434678.07 -15434677.90 0.0068 0.0049  
 Mercury -46893-11-06 00:57 J -15405935.50 -15405935.46 -15405935.41 0.0081 0.0076  
 Mercury -46892-02-02 02:23 J -15405847.47 -15405847.40 -15405847.31 0.0081 0.0068  
 Mercury -46892-05-01 04:04 J -15405759.42 -15405759.33 -15405759.22 0.0081 0.0059  
 Mercury -46892-07-28 05:30 J -15405671.37 -15405671.27 -15405671.14 0.0081 0.0051  
 Mercury -46892-10-24 07:26 J -15405583.32 -15405583.19 -15405583.07 0.0080 0.0042  
 Mercury -46891-01-20 08:52 J -15405495.26 -15405495.13 -15405494.99 0.0080 0.0033  
 Mercury -46891-04-18 10:18 J -15405407.20 -15405407.07 -15405406.92 0.0080 0.0025  
 Mercury -46891-07-15 11:59 J -15405319.14 -15405319.00 -15405318.85 0.0080 0.0017  
 Earth -46891-08-27 20:09 J -15405275.88 -15405275.66 -15405275.40 0.0080 0.0030  
 Moon -46891-08-27 22:47 J -15405275.76 -15405275.55 -15405275.30 0.0080 0.0033 \*  
 Mercury -46891-10-11 13:26 J -15405231.08 -15405230.94 -15405230.79 0.0080 0.0009

Mercury -46890-01-07 14:52 J -15405143.02 -15405142.88 -15405142.73 0.0080 0.0003

Mercury -46890-04-05 16:33 J -15405054.96 -15405054.81 -15405054.67 0.0080 0.0008

Mercury -46890-07-02 17:59 J -15404966.89 -15404966.75 -15404966.61 0.0079 0.0016

Mercury -46890-09-28 19:26 J -15404878.83 -15404878.69 -15404878.55 0.0079 0.0024

Mercury -46890-12-25 20:52 J -15404790.76 -15404790.63 -15404790.50 0.0079 0.0031

Mercury -46889-03-22 22:04 J -15404702.70 -15404702.58 -15404702.44 0.0079 0.0039

Mercury -46889-06-18 23:30 J -15404614.63 -15404614.52 -15404614.39 0.0079 0.0047

Mercury -46889-09-15 00:42 J -15404526.56 -15404526.47 -15404526.35 0.0079 0.0055

Mercury -46889-12-12 02:23 J -15404438.48 -15404438.40 -15404438.31 0.0079 0.0062

Mercury -46888-03-10 03:35 J -15404350.40 -15404350.35 -15404350.27 0.0078 0.0070

Mercury -46888-06-06 05:02 J -15404262.31 -15404262.29 -15404262.25 0.0078 0.0077

Venus -46887-10-03 04:47 J -15403778.37 -15403778.30 -15403778.20 0.0078 0.0072

Venus -46886-05-16 14:23 J -15403553.12 -15403552.90 -15403552.68 0.0077 0.0003

Venus -46886-12-27 23:02 J -15403327.64 -15403327.54 -15403327.40 0.0077 0.0064

Mercury -46735-06-15 07:54 J -15348370.19 -15348370.17 -15348370.11 0.0064 0.0062

Mercury -46735-09-11 09:06 J -15348282.18 -15348282.12 -15348282.03 0.0064 0.0057

Mercury -46735-12-08 10:33 J -15348194.15 -15348194.06 -15348193.96 0.0064 0.0052

Mercury -46734-03-06 11:16 J -15348106.12 -15348106.03 -15348105.90 0.0064 0.0048

Mercury -46734-06-02 12:28 J -15348018.09 -15348017.98 -15348017.84 0.0064 0.0044

Mercury -46734-08-29 13:40 J -15347930.05 -15347929.93 -15347929.78 0.0064 0.0039

Mercury -46734-11-25 15:06 J -15347842.01 -15347841.87 -15347841.72 0.0064 0.0034

Mercury -46733-02-21 16:18 J -15347753.97 -15347753.82 -15347753.67 0.0064 0.0029

Mercury -46733-05-19 17:30 J -15347665.93 -15347665.77 -15347665.61 0.0065 0.0024

Mercury -46733-08-15 18:42 J -15347577.88 -15347577.72 -15347577.56 0.0065 0.0019

Mercury -46733-11-11 19:54 J -15347489.83 -15347489.67 -15347489.50 0.0065 0.0014

Mercury -46732-02-07 21:06 J -15347401.79 -15347401.62 -15347401.45 0.0065 0.0009

Moon -46732-02-23 21:50 J -15347385.84 -15347385.59 -15347385.33 0.0065 0.0010

Earth -46732-02-24 01:40 J -15347385.69 -15347385.43 -15347385.17 0.0065 0.0006 \*

Mercury -46732-05-06 22:18 J -15347313.74 -15347313.57 -15347313.40 0.0065 0.0004

Mercury -46732-08-02 23:30 J -15347225.69 -15347225.52 -15347225.34 0.0065 0.0002

Mercury -46732-10-30 00:42 J -15347137.63 -15347137.47 -15347137.29 0.0065 0.0007

Mercury -46731-01-26 02:09 J -15347049.58 -15347049.41 -15347049.24 0.0065 0.0011

Mercury -46731-04-24 03:21 J -15346961.53 -15346961.36 -15346961.19 0.0065 0.0016

Mercury -46731-07-21 04:33 J -15346873.47 -15346873.31 -15346873.14 0.0065 0.0022

Mercury -46731-10-17 05:59 J -15346785.41 -15346785.25 -15346785.10 0.0065 0.0027

Mercury -46730-01-13 06:57 J -15346697.35 -15346697.21 -15346697.05 0.0066 0.0032

Mercury -46730-04-11 08:09 J -15346609.28 -15346609.16 -15346609.00 0.0066 0.0038

Mercury -46730-07-08 09:35 J -15346521.22 -15346521.10 -15346520.96 0.0066 0.0043

Mercury -46730-10-04 11:02 J -15346433.15 -15346433.04 -15346432.92 0.0066 0.0048

Mercury -46730-12-31 11:59 J -15346345.08 -15346345.00 -15346344.88 0.0066 0.0054

Mercury -46729-03-28 13:40 J -15346257.00 -15346256.93 -15346256.85 0.0066 0.0059

Mercury -46729-06-24 14:38 J -15346168.90 -15346168.89 -15346168.83 0.0066 0.0065

Venus -46726-01-01 06:42 J -15345248.38 -15345248.22 -15345248.02 0.0067 0.0037

Venus -46726-08-14 12:14 J -15345023.21 -15345022.99 -15345022.77 0.0067 0.0007

Venus -46725-03-26 16:47 J -15344797.91 -15344797.80 -15344797.63 0.0068 0.0053

Mercury -46647-12-29 15:06 J -15316030.87 -15316030.87 -15316030.85 0.0081 0.0081

Mercury -46646-03-27 16:47 J -15315942.86 -15315942.80 -15315942.73 0.0081 0.0072

Mars -46646-04-10 19:11 J -15315928.75 -15315928.70 -15315928.57 0.0081 0.0078

Mercury -46646-06-23 18:28 J -15315854.82 -15315854.73 -15315854.63 0.0081 0.0063

Mercury -46646-09-19 19:54 J -15315766.77 -15315766.67 -15315766.55 0.0081 0.0055

Mercury -46646-12-16 21:21 J -15315678.71 -15315678.61 -15315678.47 0.0080 0.0047

Mercury -46645-03-13 23:16 J -15315590.66 -15315590.53 -15315590.40 0.0080 0.0037

Mercury -46645-06-10 00:42 J -15315502.60 -15315502.47 -15315502.33 0.0080 0.0029

Earth -46645-08-28 15:35 J -15315423.01 -15315422.85 -15315422.65 0.0080 0.0058

Moon -46645-08-28 17:30 J -15315422.91 -15315422.77 -15315422.57 0.0080 0.0062 \*

Mercury -46645-09-06 02:09 J -15315414.54 -15315414.41 -15315414.26 0.0080 0.0021

Mercury -46645-12-03 03:50 J -15315326.48 -15315326.34 -15315326.19 0.0080 0.0013

Mercury -46644-03-01 05:16 J -15315238.42 -15315238.28 -15315238.13 0.0080 0.0005

Mercury -46644-05-28 06:42 J -15315150.36 -15315150.22 -15315150.07 0.0080 0.0005

Mercury -46644-08-24 08:23 J -15315062.30 -15315062.15 -15315062.01 0.0079 0.0012



Mercury -46644-11-20 09:50 J -15314974.23 -15314974.09 -15314973.95 0.0079 0.0020  
 Mercury -46643-02-16 11:16 J -15314886.17 -15314886.03 -15314885.89 0.0079 0.0028  
 Mercury -46643-05-15 12:42 J -15314798.10 -15314797.97 -15314797.84 0.0079 0.0035  
 Mercury -46643-08-11 13:54 J -15314710.03 -15314709.92 -15314709.79 0.0079 0.0043  
 Mercury -46643-11-07 15:21 J -15314621.96 -15314621.86 -15314621.74 0.0079 0.0051  
 Mercury -46642-02-03 16:33 J -15314533.89 -15314533.81 -15314533.70 0.0079 0.0059  
 Mercury -46642-05-02 17:59 J -15314445.82 -15314445.75 -15314445.66 0.0078 0.0066  
 Mercury -46642-07-29 19:11 J -15314357.73 -15314357.70 -15314357.63 0.0078 0.0074  
 Venus -46641-10-31 10:18 J -15313898.13 -15313898.07 -15313897.95 0.0078 0.0071  
 Venus -46640-06-13 20:23 J -15313672.87 -15313672.65 -15313672.43 0.0077 0.0002  
 Venus -46639-01-25 05:30 J -15313447.38 -15313447.27 -15313447.16 0.0077 0.0065  
 Mercury -46489-11-02 22:33 J -15258377.59 -15258377.56 -15258377.48 0.0064 0.0061  
 Mercury -46488-01-29 23:45 J -15258289.57 -15258289.51 -15258289.41 0.0064 0.0056  
 Mercury -46488-04-28 01:11 J -15258201.54 -15258201.45 -15258201.34 0.0064 0.0051  
 Mercury -46488-07-25 02:23 J -15258113.51 -15258113.40 -15258113.28 0.0064 0.0047  
 Mercury -46488-10-21 03:21 J -15258025.47 -15258025.36 -15258025.22 0.0064 0.0042  
 Mercury -46487-01-17 04:33 J -15257937.43 -15257937.31 -15257937.16 0.0064 0.0037  
 Mercury -46487-04-15 05:45 J -15257849.39 -15257849.26 -15257849.10 0.0064 0.0033  
 Mercury -46487-07-12 06:57 J -15257761.35 -15257761.21 -15257761.04 0.0065 0.0028  
 Mercury -46487-10-08 08:09 J -15257673.31 -15257673.16 -15257672.99 0.0065 0.0023  
 Mercury -46486-01-04 09:35 J -15257585.26 -15257585.10 -15257584.93 0.0065 0.0018  
 Earth -46486-02-25 23:16 J -15257532.77 -15257532.53 -15257532.29 0.0065 0.0023  
 Moon -46486-02-25 23:59 J -15257532.71 -15257532.50 -15257532.25 0.0065 0.0027 \*  
 Mercury -46486-04-02 10:47 J -15257497.21 -15257497.05 -15257496.88 0.0065 0.0013  
 Mercury -46486-06-29 11:59 J -15257409.16 -15257409.00 -15257408.82 0.0065 0.0008  
 Mercury -46486-09-25 13:26 J -15257321.11 -15257320.94 -15257320.77 0.0065 0.0003  
 Mercury -46486-12-22 14:38 J -15257233.06 -15257232.89 -15257232.72 0.0065 0.0003  
 Moon -46485-02-27 08:38 J -15257166.26 -15257166.14 -15257165.97 0.0065 0.0054  
 Earth -46485-02-27 11:30 J -15257166.14 -15257166.02 -15257165.83 0.0065 0.0052 \*  
 Mercury -46485-03-19 15:50 J -15257145.01 -15257144.84 -15257144.67 0.0065 0.0008

Mercury -46485-06-15 16:47 J -15257056.96 -15257056.80 -15257056.62 0.0065 0.0014

Mercury -46485-09-11 18:14 J -15256968.90 -15256968.74 -15256968.57 0.0065 0.0018

Mercury -46485-12-08 19:26 J -15256880.84 -15256880.69 -15256880.52 0.0065 0.0023

Mercury -46484-03-06 20:38 J -15256792.78 -15256792.64 -15256792.47 0.0066 0.0029

Mercury -46484-06-02 22:04 J -15256704.72 -15256704.58 -15256704.43 0.0066 0.0034

Mercury -46484-08-29 23:30 J -15256616.66 -15256616.52 -15256616.38 0.0066 0.0039

Mercury -46484-11-26 00:28 J -15256528.59 -15256528.48 -15256528.34 0.0066 0.0045

Mercury -46483-02-22 01:54 J -15256440.52 -15256440.42 -15256440.30 0.0066 0.0050

Mercury -46483-05-21 03:35 J -15256352.44 -15256352.35 -15256352.26 0.0066 0.0055

Mercury -46483-08-17 04:18 J -15256264.36 -15256264.32 -15256264.23 0.0066 0.0062

Venus -46480-01-29 13:40 J -15255368.11 -15255367.93 -15255367.73 0.0067 0.0033

Venus -46480-09-11 18:57 J -15255142.93 -15255142.71 -15255142.49 0.0067 0.0011

Venus -46479-04-24 23:45 J -15254917.62 -15254917.51 -15254917.37 0.0068 0.0056

Mercury -46400-05-19 06:57 J -15226038.24 -15226038.21 -15226038.14 0.0081 0.0076

Mercury -46400-08-15 08:52 J -15225950.21 -15225950.13 -15225950.04 0.0081 0.0067

Mars -46400-08-31 22:33 J -15225933.90 -15225933.56 -15225933.22 0.0081 0.0004

Mercury -46400-11-11 10:18 J -15225862.16 -15225862.07 -15225861.96 0.0081 0.0059

Mercury -46399-02-07 12:14 J -15225774.11 -15225773.99 -15225773.88 0.0080 0.0050

Mercury -46399-05-06 13:40 J -15225686.05 -15225685.93 -15225685.80 0.0080 0.0041

Mercury -46399-08-02 15:06 J -15225598.00 -15225597.87 -15225597.73 0.0080 0.0033

Mercury -46399-10-29 16:33 J -15225509.94 -15225509.81 -15225509.66 0.0080 0.0025

Mercury -46398-01-25 18:14 J -15225421.88 -15225421.74 -15225421.59 0.0080 0.0017

Mercury -46398-04-23 19:54 J -15225333.82 -15225333.67 -15225333.52 0.0080 0.0008

Mercury -46398-07-20 21:21 J -15225245.76 -15225245.61 -15225245.46 0.0080 0.0000

Earth -46398-09-01 16:18 J -15225203.00 -15225202.82 -15225202.62 0.0080 0.0055

Moon -46398-09-01 19:54 J -15225202.83 -15225202.67 -15225202.49 0.0080 0.0059 \*

Mercury -46398-10-16 22:47 J -15225157.70 -15225157.55 -15225157.40 0.0079 0.0008

Mercury -46397-01-13 00:14 J -15225069.63 -15225069.49 -15225069.34 0.0079 0.0016

Mercury -46397-04-10 01:40 J -15224981.57 -15224981.43 -15224981.29 0.0079 0.0024

Mercury -46397-07-07 02:52 J -15224893.50 -15224893.38 -15224893.23 0.0079 0.0032

Mercury -46397-10-03 04:33 J -15224805.44 -15224805.31 -15224805.18 0.0079 0.0039  
 Mercury -46397-12-30 05:45 J -15224717.37 -15224717.26 -15224717.13 0.0079 0.0047  
 Mercury -46396-03-28 07:11 J -15224629.30 -15224629.20 -15224629.09 0.0079 0.0055  
 Mercury -46396-06-24 08:52 J -15224541.22 -15224541.13 -15224541.05 0.0079 0.0062  
 Mercury -46396-09-20 09:50 J -15224453.14 -15224453.09 -15224453.01 0.0078 0.0070  
 Mercury -46396-12-17 11:30 J -15224365.05 -15224365.02 -15224365.00 0.0078 0.0077  
 Venus -46395-11-29 16:33 J -15224017.89 -15224017.81 -15224017.68 0.0078 0.0068  
 Venus -46394-07-13 02:23 J -15223792.62 -15223792.40 -15223792.17 0.0077 0.0002  
 Venus -46393-02-23 11:02 J -15223567.11 -15223567.04 -15223566.92 0.0077 0.0069  
 Mars -46243-08-23 15:21 J -15168598.04 -15168597.86 -15168597.61 0.0064 0.0044  
 Mercury -46243-12-26 13:40 J -15168472.96 -15168472.93 -15168472.87 0.0064 0.0061  
 Mercury -46242-03-24 15:06 J -15168384.94 -15168384.87 -15168384.79 0.0064 0.0057  
 Mercury -46242-06-20 15:50 J -15168296.92 -15168296.84 -15168296.72 0.0064 0.0052  
 Mercury -46242-09-16 17:02 J -15168208.88 -15168208.79 -15168208.66 0.0064 0.0048  
 Mercury -46242-12-13 18:28 J -15168120.85 -15168120.73 -15168120.60 0.0064 0.0043  
 Mercury -46241-03-10 19:40 J -15168032.81 -15168032.68 -15168032.54 0.0064 0.0038  
 Mercury -46241-06-06 20:52 J -15167944.77 -15167944.63 -15167944.48 0.0065 0.0033  
 Mercury -46241-09-02 22:18 J -15167856.73 -15167856.57 -15167856.42 0.0065 0.0028  
 Mercury -46241-11-29 23:02 J -15167768.68 -15167768.54 -15167768.36 0.0065 0.0024  
 Mercury -46240-02-26 00:28 J -15167680.64 -15167680.48 -15167680.31 0.0065 0.0018  
 Earth -46240-02-27 01:54 J -15167679.65 -15167679.42 -15167679.19 0.0065 0.0029  
 Moon -46240-02-27 05:02 J -15167679.51 -15167679.29 -15167679.05 0.0065 0.0032 \*  
 Mercury -46240-05-25 01:54 J -15167592.59 -15167592.42 -15167592.26 0.0065 0.0013  
 Mercury -46240-08-21 03:06 J -15167504.54 -15167504.37 -15167504.20 0.0065 0.0008  
 Mercury -46240-11-17 04:18 J -15167416.49 -15167416.32 -15167416.15 0.0065 0.0003  
 Mercury -46239-02-13 05:30 J -15167328.44 -15167328.27 -15167328.10 0.0065 0.0002  
 Moon -46239-02-28 13:11 J -15167313.11 -15167312.95 -15167312.77 0.0065 0.0048  
 Earth -46239-02-28 14:52 J -15167313.06 -15167312.88 -15167312.69 0.0065 0.0046 \*  
 Mercury -46239-05-12 06:42 J -15167240.39 -15167240.22 -15167240.04 0.0065 0.0007  
 Mercury -46239-08-08 07:54 J -15167152.33 -15167152.17 -15167151.99 0.0065 0.0012

Mercury -46239-11-04 09:06 J -15167064.27 -15167064.12 -15167063.94 0.0065 0.0018  
 Mercury -46238-01-31 10:33 J -15166976.22 -15166976.06 -15166975.89 0.0066 0.0023  
 Mercury -46238-04-29 11:45 J -15166888.16 -15166888.01 -15166887.85 0.0066 0.0028  
 Mercury -46238-07-26 13:11 J -15166800.10 -15166799.95 -15166799.80 0.0066 0.0033  
 Mercury -46238-10-22 14:09 J -15166712.03 -15166711.91 -15166711.75 0.0066 0.0039  
 Mercury -46237-01-18 15:35 J -15166623.96 -15166623.85 -15166623.71 0.0066 0.0044  
 Mercury -46237-04-15 17:02 J -15166535.89 -15166535.79 -15166535.67 0.0066 0.0049  
 Mercury -46237-07-12 18:14 J -15166447.82 -15166447.74 -15166447.63 0.0066 0.0055  
 Mercury -46237-10-08 19:40 J -15166359.74 -15166359.68 -15166359.60 0.0066 0.0061  
 Mercury -46236-01-04 21:06 J -15166271.62 -15166271.62 -15166271.60 0.0066 0.0066  
 Venus -46235-07-17 18:14 J -15165712.78 -15165712.74 -15165712.64 0.0067 0.0063  
 Venus -46234-02-27 23:30 J -15165487.72 -15165487.52 -15165487.30 0.0067 0.0019  
 Venus -46234-10-11 04:33 J -15165262.51 -15165262.31 -15165262.10 0.0067 0.0025  
 Mercury -46154-07-11 22:47 J -15136133.59 -15136133.55 -15136133.49 0.0081 0.0075  
 Mercury -46154-10-08 00:28 J -15136045.56 -15136045.48 -15136045.39 0.0081 0.0066  
 Mercury -46153-01-04 01:54 J -15135957.51 -15135957.42 -15135957.30 0.0080 0.0058  
 Mercury -46153-04-01 03:50 J -15135869.46 -15135869.34 -15135869.22 0.0080 0.0049  
 Mercury -46153-06-28 05:16 J -15135781.40 -15135781.28 -15135781.15 0.0080 0.0040  
 Mercury -46153-09-24 06:42 J -15135693.35 -15135693.22 -15135693.08 0.0080 0.0032  
 Mercury -46153-12-21 08:23 J -15135605.29 -15135605.15 -15135605.01 0.0080 0.0024  
 Mercury -46152-03-19 09:50 J -15135517.23 -15135517.09 -15135516.94 0.0080 0.0016  
 Mercury -46152-06-15 11:30 J -15135429.17 -15135429.02 -15135428.88 0.0080 0.0007  
 Moon -46152-09-02 16:47 J -15135349.99 -15135349.80 -15135349.57 0.0079 0.0050  
 Earth -46152-09-02 17:45 J -15135349.95 -15135349.76 -15135349.53 0.0079 0.0047 \*  
 Mercury -46152-09-11 12:57 J -15135341.11 -15135340.96 -15135340.81 0.0079 0.0001  
 Mercury -46152-12-08 14:23 J -15135253.04 -15135252.90 -15135252.75 0.0079 0.0009  
 Mercury -46151-03-06 15:50 J -15135164.98 -15135164.84 -15135164.69 0.0079 0.0017  
 Mercury -46151-06-02 17:16 J -15135076.92 -15135076.78 -15135076.64 0.0079 0.0024  
 Mercury -46151-08-29 18:42 J -15134988.85 -15134988.72 -15134988.58 0.0079 0.0032  
 Mercury -46151-11-25 19:54 J -15134900.78 -15134900.67 -15134900.53 0.0079 0.0040

Mercury -46150-02-21 21:21 J -15134812.71 -15134812.61 -15134812.48 0.0079 0.0048

Mercury -46150-05-20 23:02 J -15134724.64 -15134724.54 -15134724.44 0.0079 0.0055

Mercury -46150-08-17 00:14 J -15134636.57 -15134636.49 -15134636.40 0.0078 0.0062

Mercury -46150-11-13 01:40 J -15134548.49 -15134548.43 -15134548.36 0.0078 0.0070

Mercury -46149-02-09 02:52 J -15134460.39 -15134460.38 -15134460.35 0.0078 0.0077

Venus -46149-12-28 02:38 J -15134137.54 -15134137.39 -15134137.21 0.0078 0.0051

Venus -46148-08-10 12:14 J -15133912.20 -15133911.99 -15133911.77 0.0077 0.0018

# 46TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 46th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	-45996-01-14 08:23 J	-15078602.44	-15078602.15	-15078601.86	0.0064	0.0004		
Mercury	-45996-02-17 04:18 J	-15078568.33	-15078568.32	-15078568.25	0.0064	0.0063		
Mercury	-45996-05-16 05:45 J	-15078480.32	-15078480.26	-15078480.17	0.0064	0.0057		
Mercury	-45996-08-12 06:57 J	-15078392.29	-15078392.21	-15078392.10	0.0064	0.0053		
Mercury	-45996-11-08 08:23 J	-15078304.26	-15078304.15	-15078304.04	0.0064	0.0048		
Mercury	-45995-02-04 09:06 J	-15078216.23	-15078216.12	-15078215.98	0.0064	0.0044		
Mercury	-45995-05-03 10:18 J	-15078128.19	-15078128.07	-15078127.92	0.0065	0.0039		
Mercury	-45995-07-30 11:30 J	-15078040.15	-15078040.02	-15078039.86	0.0065	0.0034		
Mercury	-45995-10-26 12:42 J	-15077952.11	-15077951.97	-15077951.80	0.0065	0.0029		
Mercury	-45994-01-22 14:09 J	-15077864.06	-15077863.91	-15077863.75	0.0065	0.0024		
Moon	-45994-03-01 01:40 J	-15077826.63	-15077826.43	-15077826.20	0.0065	0.0037		

Earth -45994-03-01 03:21 J -15077826.55 -15077826.36 -15077826.11 0.0065 0.0036 \*  
 Mercury -45994-04-20 15:21 J -15077776.02 -15077775.86 -15077775.69 0.0065 0.0019  
 Mercury -45994-07-17 16:33 J -15077687.97 -15077687.81 -15077687.64 0.0065 0.0014  
 Mercury -45994-10-13 17:45 J -15077599.92 -15077599.76 -15077599.58 0.0065 0.0009  
 Mercury -45993-01-09 19:11 J -15077511.87 -15077511.70 -15077511.53 0.0065 0.0004  
 Earth -45993-03-01 16:47 J -15077459.99 -15077459.80 -15077459.58 0.0065 0.0040  
 Moon -45993-03-01 20:23 J -15077459.84 -15077459.65 -15077459.44 0.0065 0.0041 \*  
 Mercury -45993-04-06 20:23 J -15077423.82 -15077423.65 -15077423.48 0.0065 0.0002  
 Mercury -45993-07-03 21:35 J -15077335.77 -15077335.60 -15077335.42 0.0065 0.0007  
 Mercury -45993-09-29 23:02 J -15077247.71 -15077247.54 -15077247.37 0.0065 0.0012  
 Mercury -45993-12-27 00:14 J -15077159.65 -15077159.49 -15077159.32 0.0065 0.0017  
 Mercury -45992-03-25 01:11 J -15077071.60 -15077071.45 -15077071.27 0.0066 0.0023  
 Mercury -45992-06-21 02:38 J -15076983.54 -15076983.39 -15076983.22 0.0066 0.0028  
 Mercury -45992-09-17 03:50 J -15076895.47 -15076895.34 -15076895.18 0.0066 0.0033  
 Mercury -45992-12-14 05:16 J -15076807.41 -15076807.28 -15076807.13 0.0066 0.0038  
 Mercury -45991-03-12 06:28 J -15076719.34 -15076719.23 -15076719.09 0.0066 0.0044  
 Mercury -45991-06-08 07:54 J -15076631.27 -15076631.17 -15076631.04 0.0066 0.0049  
 Mercury -45991-09-04 09:21 J -15076543.20 -15076543.11 -15076543.01 0.0066 0.0055  
 Mercury -45991-12-01 10:18 J -15076455.12 -15076455.07 -15076454.98 0.0066 0.0061  
 Mercury -45990-02-27 11:59 J -15076367.01 -15076367.00 -15076366.97 0.0066 0.0066  
 Venus -45989-08-15 04:18 J -15075832.45 -15075832.32 -15075832.15 0.0067 0.0049  
 Venus -45988-03-28 09:35 J -15075607.31 -15075607.10 -15075606.87 0.0067 0.0005  
 Venus -45988-11-08 14:09 J -15075382.06 -15075381.91 -15075381.71 0.0067 0.0041  
 Mercury -45908-09-02 14:38 J -15046228.93 -15046228.89 -15046228.81 0.0081 0.0073  
 Mercury -45908-11-29 16:33 J -15046140.89 -15046140.81 -15046140.72 0.0080 0.0064  
 Mercury -45907-02-25 17:59 J -15046052.85 -15046052.75 -15046052.63 0.0080 0.0055  
 Mercury -45907-05-24 19:54 J -15045964.79 -15045964.67 -15045964.55 0.0080 0.0047  
 Mercury -45907-08-20 21:21 J -15045876.74 -15045876.61 -15045876.48 0.0080 0.0038  
 Mercury -45907-11-16 22:47 J -15045788.68 -15045788.55 -15045788.41 0.0080 0.0030  
 Mercury -45906-02-13 00:14 J -15045700.62 -15045700.49 -15045700.34 0.0080 0.0022

Mercury -45906-05-12 01:54 J -15045612.56 -15045612.42 -15045612.27 0.0080 0.0013

Mercury -45906-08-08 03:21 J -15045524.50 -15045524.36 -15045524.21 0.0079 0.0006

Moon -45906-09-04 18:14 J -15045496.94 -15045496.74 -15045496.53 0.0079 0.0046

Earth -45906-09-04 21:21 J -15045496.81 -15045496.61 -15045496.38 0.0079 0.0043 \*

Mercury -45906-11-04 05:02 J -15045436.44 -15045436.29 -15045436.15 0.0079 0.0003

Mercury -45905-01-31 06:28 J -15045348.38 -15045348.23 -15045348.09 0.0079 0.0011

Mercury -45905-04-28 07:54 J -15045260.31 -15045260.17 -15045260.03 0.0079 0.0018

Mercury -45905-07-25 09:21 J -15045172.25 -15045172.11 -15045171.97 0.0079 0.0026

Mercury -45905-10-21 10:33 J -15045084.18 -15045084.06 -15045083.92 0.0079 0.0034

Mercury -45904-01-17 11:59 J -15044996.12 -15044996.00 -15044995.87 0.0079 0.0042

Mercury -45904-04-15 13:11 J -15044908.05 -15044907.95 -15044907.82 0.0079 0.0050

Mercury -45904-07-12 14:38 J -15044819.98 -15044819.89 -15044819.78 0.0078 0.0057

Mercury -45904-10-08 15:50 J -15044731.90 -15044731.84 -15044731.74 0.0078 0.0065

Mercury -45903-01-04 17:30 J -15044643.82 -15044643.77 -15044643.70 0.0078 0.0071

Venus -45902-01-26 13:40 J -15044257.13 -15044256.93 -15044256.71 0.0078 0.0029

Venus -45902-09-08 22:47 J -15044031.72 -15044031.55 -15044031.35 0.0077 0.0040

Mercury -45750-04-11 20:38 J -14988663.68 -14988663.64 -14988663.58 0.0064 0.0061

Mercury -45750-07-08 22:04 J -14988575.66 -14988575.58 -14988575.50 0.0064 0.0056

Mercury -45750-10-04 22:33 J -14988487.64 -14988487.56 -14988487.43 0.0064 0.0052

Mercury -45750-12-31 23:59 J -14988399.60 -14988399.50 -14988399.37 0.0064 0.0047

Mercury -45749-03-29 01:11 J -14988311.57 -14988311.45 -14988311.31 0.0065 0.0042

Mercury -45749-06-25 02:23 J -14988223.53 -14988223.40 -14988223.25 0.0065 0.0037

Mercury -45749-09-21 03:35 J -14988135.49 -14988135.35 -14988135.19 0.0065 0.0032

Mercury -45749-12-18 04:47 J -14988047.44 -14988047.30 -14988047.14 0.0065 0.0027

Moon -45748-03-02 07:26 J -14987973.39 -14987973.19 -14987972.96 0.0065 0.0034

Earth -45748-03-02 09:50 J -14987973.29 -14987973.09 -14987972.84 0.0065 0.0033 \*

Mercury -45748-03-16 05:59 J -14987959.40 -14987959.25 -14987959.08 0.0065 0.0022

Mercury -45748-06-12 07:11 J -14987871.35 -14987871.20 -14987871.02 0.0065 0.0017

Mercury -45748-09-08 08:38 J -14987783.31 -14987783.14 -14987782.97 0.0065 0.0012

Mercury -45748-12-05 09:50 J -14987695.26 -14987695.09 -14987694.92 0.0065 0.0007

Mercury -45747-03-03 11:02 J -14987607.21 -14987607.04 -14987606.86 0.0065 0.0003

Earth -45747-03-03 23:02 J -14987606.72 -14987606.54 -14987606.32 0.0065 0.0043

Moon -45747-03-03 23:45 J -14987606.69 -14987606.51 -14987606.29 0.0065 0.0043 \*

Mercury -45747-05-30 12:28 J -14987519.15 -14987518.98 -14987518.81 0.0065 0.0003

Mercury -45747-08-26 13:40 J -14987431.10 -14987430.93 -14987430.76 0.0065 0.0009

Mercury -45747-11-22 14:52 J -14987343.04 -14987342.88 -14987342.71 0.0066 0.0014

Mercury -45746-02-18 16:18 J -14987254.99 -14987254.82 -14987254.66 0.0066 0.0019

Mercury -45746-05-17 17:16 J -14987166.93 -14987166.78 -14987166.61 0.0066 0.0025

Mercury -45746-08-13 18:28 J -14987078.87 -14987078.73 -14987078.56 0.0066 0.0030

Mercury -45746-11-09 19:54 J -14986990.80 -14986990.67 -14986990.51 0.0066 0.0035

Mercury -45745-02-05 21:21 J -14986902.74 -14986902.61 -14986902.47 0.0066 0.0040

Mercury -45745-05-03 22:18 J -14986814.67 -14986814.57 -14986814.42 0.0066 0.0047

Mercury -45745-07-30 23:59 J -14986726.60 -14986726.50 -14986726.38 0.0066 0.0051

Mercury -45745-10-27 00:57 J -14986638.52 -14986638.46 -14986638.35 0.0066 0.0058

Mercury -45744-01-23 02:38 J -14986550.43 -14986550.39 -14986550.32 0.0066 0.0063

Venus -45743-09-13 16:47 J -14985951.99 -14985951.80 -14985951.58 0.0067 0.0026

Venus -45742-04-26 22:04 J -14985726.79 -14985726.58 -14985726.37 0.0067 0.0019

Venus -45742-12-08 03:06 J -14985501.43 -14985501.37 -14985501.29 0.0068 0.0064

Mercury -45662-07-30 06:42 J -14956412.27 -14956412.22 -14956412.17 0.0081 0.0075

Mercury -45662-10-26 07:54 J -14956324.24 -14956324.17 -14956324.07 0.0080 0.0067

Mercury -45661-01-22 09:50 J -14956236.19 -14956236.09 -14956235.99 0.0080 0.0058

Mercury -45661-04-19 11:16 J -14956148.14 -14956148.03 -14956147.91 0.0080 0.0049

Mercury -45661-07-16 12:42 J -14956060.09 -14956059.97 -14956059.83 0.0080 0.0041

Mercury -45661-10-12 14:23 J -14955972.03 -14955971.90 -14955971.76 0.0080 0.0033

Mercury -45660-01-08 15:50 J -14955883.97 -14955883.84 -14955883.69 0.0080 0.0025

Mercury -45660-04-06 17:30 J -14955795.91 -14955795.77 -14955795.62 0.0080 0.0016

Mercury -45660-07-03 18:57 J -14955707.85 -14955707.71 -14955707.56 0.0079 0.0008

Earth -45660-09-06 06:28 J -14955643.42 -14955643.23 -14955643.04 0.0079 0.0054

Moon -45660-09-06 07:40 J -14955643.33 -14955643.18 -14955642.98 0.0079 0.0057 \*

Mercury -45660-09-29 20:23 J -14955619.79 -14955619.65 -14955619.50 0.0079 0.0002



Mercury -45660-12-26 21:50 J -14955531.73 -14955531.59 -14955531.44 0.0079 0.0008  
 Mercury -45659-03-24 23:16 J -14955443.67 -14955443.53 -14955443.38 0.0079 0.0016  
 Mercury -45659-06-21 00:42 J -14955355.60 -14955355.47 -14955355.32 0.0079 0.0024  
 Mercury -45659-09-17 02:09 J -14955267.54 -14955267.41 -14955267.27 0.0079 0.0031  
 Mercury -45659-12-14 03:35 J -14955179.47 -14955179.35 -14955179.22 0.0079 0.0039  
 Mercury -45658-03-12 04:47 J -14955091.40 -14955091.30 -14955091.17 0.0079 0.0047  
 Mercury -45658-06-08 06:14 J -14955003.33 -14955003.24 -14955003.13 0.0078 0.0054  
 Mercury -45658-09-04 07:40 J -14954915.26 -14954915.18 -14954915.08 0.0078 0.0062  
 Mercury -45658-12-01 08:52 J -14954827.18 -14954827.13 -14954827.05 0.0078 0.0069  
 Mercury -45657-02-27 10:18 J -14954739.09 -14954739.07 -14954739.03 0.0078 0.0076  
 Venus -45657-07-13 17:45 J -14954601.87 -14954601.76 -14954601.62 0.0078 0.0064  
 Venus -45656-02-24 03:21 J -14954376.58 -14954376.36 -14954376.13 0.0077 0.0006  
 Venus -45656-10-07 12:28 J -14954151.04 -14954150.98 -14954150.91 0.0077 0.0073  
 Mercury -45504-06-03 12:14 J -14898759.04 -14898758.99 -14898758.92 0.0064 0.0060  
 Mercury -45504-08-30 13:11 J -14898671.02 -14898670.95 -14898670.84 0.0064 0.0055  
 Mercury -45504-11-26 14:23 J -14898582.99 -14898582.90 -14898582.78 0.0064 0.0051  
 Mercury -45503-02-22 15:35 J -14898494.95 -14898494.85 -14898494.71 0.0065 0.0046  
 Mercury -45503-05-21 16:47 J -14898406.91 -14898406.80 -14898406.65 0.0065 0.0041  
 Mercury -45503-08-17 18:14 J -14898318.87 -14898318.74 -14898318.59 0.0065 0.0036  
 Mercury -45503-11-13 19:26 J -14898230.83 -14898230.69 -14898230.54 0.0065 0.0031  
 Mercury -45502-02-09 20:38 J -14898142.79 -14898142.64 -14898142.48 0.0065 0.0026  
 Earth -45502-03-04 15:21 J -14898120.07 -14898119.86 -14898119.63 0.0065 0.0033  
 Moon -45502-03-04 17:59 J -14898119.96 -14898119.75 -14898119.52 0.0065 0.0033 \*  
 Mercury -45502-05-08 21:50 J -14898054.74 -14898054.59 -14898054.42 0.0065 0.0021  
 Mercury -45502-08-04 23:02 J -14897966.70 -14897966.54 -14897966.37 0.0065 0.0016  
 Mercury -45502-11-01 00:14 J -14897878.65 -14897878.49 -14897878.31 0.0065 0.0011  
 Mercury -45501-01-28 01:40 J -14897790.60 -14897790.43 -14897790.26 0.0065 0.0006  
 Moon -45501-03-05 00:28 J -14897753.65 -14897753.48 -14897753.25 0.0065 0.0042  
 Earth -45501-03-05 04:18 J -14897753.49 -14897753.32 -14897753.10 0.0065 0.0043 \*  
 Mercury -45501-04-25 02:52 J -14897702.55 -14897702.38 -14897702.21 0.0065 0.0001

Mercury -45501-07-22 04:04 J -14897614.50 -14897614.33 -14897614.15 0.0065 0.0005  
 Mercury -45501-10-18 05:16 J -14897526.44 -14897526.28 -14897526.10 0.0066 0.0010  
 Mercury -45500-01-14 06:42 J -14897438.39 -14897438.22 -14897438.05 0.0066 0.0015  
 Mercury -45500-04-12 07:54 J -14897350.33 -14897350.17 -14897350.00 0.0066 0.0020  
 Mercury -45500-07-09 09:06 J -14897262.27 -14897262.12 -14897261.95 0.0066 0.0026  
 Mercury -45500-10-05 10:18 J -14897174.21 -14897174.07 -14897173.91 0.0066 0.0031  
 Mercury -45499-01-01 11:45 J -14897086.15 -14897086.01 -14897085.86 0.0066 0.0036  
 Mercury -45499-03-30 12:42 J -14896998.08 -14896997.97 -14896997.81 0.0066 0.0043  
 Mercury -45499-06-26 14:23 J -14896910.01 -14896909.90 -14896909.77 0.0066 0.0047  
 Mercury -45499-09-22 15:50 J -14896821.94 -14896821.84 -14896821.73 0.0066 0.0053  
 Mercury -45499-12-19 16:47 J -14896733.86 -14896733.80 -14896733.70 0.0066 0.0059  
 Mercury -45498-03-17 18:42 J -14896645.76 -14896645.72 -14896645.68 0.0067 0.0064  
 Venus -45497-02-29 23:30 J -14896296.66 -14896296.52 -14896296.36 0.0067 0.0049  
 Venus -45497-10-12 04:33 J -14896071.53 -14896071.31 -14896071.09 0.0067 0.0005  
 Venus -45496-05-25 09:06 J -14895846.28 -14895846.12 -14895845.92 0.0067 0.0040  
 Mars -45416-05-06 19:26 J -14866645.03 -14866644.69 -14866644.35 0.0081 0.0001  
 Mercury -45416-06-24 21:35 J -14866595.62 -14866595.60 -14866595.56 0.0081 0.0079  
 Mercury -45416-09-20 23:30 J -14866507.59 -14866507.52 -14866507.45 0.0080 0.0070  
 Mercury -45416-12-18 00:57 J -14866419.55 -14866419.46 -14866419.36 0.0080 0.0061  
 Mercury -45415-03-16 02:23 J -14866331.50 -14866331.40 -14866331.28 0.0080 0.0053  
 Mercury -45415-06-12 04:04 J -14866243.45 -14866243.33 -14866243.20 0.0080 0.0044  
 Moon -45415-09-06 05:45 J -14866157.28 -14866157.26 -14866157.22 0.0080 0.0079  
 Earth -45415-09-06 09:06 J -14866157.16 -14866157.12 -14866157.03 0.0080 0.0077  
 Mercury -45415-09-08 05:45 J -14866155.39 -14866155.26 -14866155.13 0.0080 0.0036  
 Mercury -45415-12-05 07:11 J -14866067.33 -14866067.20 -14866067.06 0.0080 0.0028  
 Mercury -45414-03-03 08:38 J -14865979.28 -14865979.14 -14865978.99 0.0080 0.0020  
 Mercury -45414-05-30 10:18 J -14865891.21 -14865891.07 -14865890.92 0.0079 0.0011  
 Mercury -45414-08-26 11:45 J -14865803.15 -14865803.01 -14865802.86 0.0079 0.0004  
 Earth -45414-09-08 13:26 J -14865790.08 -14865789.94 -14865789.75 0.0079 0.0062  
 Moon -45414-09-08 16:18 J -14865789.94 -14865789.82 -14865789.63 0.0079 0.0064 \*

Mercury -45414-11-22 13:11 J -14865715.09 -14865714.95 -14865714.80 0.0079 0.0005

Mercury -45413-02-18 14:38 J -14865627.03 -14865626.89 -14865626.74 0.0079 0.0013

Mercury -45413-05-16 16:04 J -14865538.97 -14865538.83 -14865538.68 0.0079 0.0020

Mercury -45413-08-12 17:30 J -14865450.90 -14865450.77 -14865450.63 0.0079 0.0028

Mercury -45413-11-08 18:57 J -14865362.84 -14865362.71 -14865362.58 0.0079 0.0036

Mercury -45412-02-04 20:09 J -14865274.77 -14865274.66 -14865274.53 0.0079 0.0044

Mercury -45412-05-03 21:50 J -14865186.70 -14865186.59 -14865186.48 0.0078 0.0051

Mercury -45412-07-30 22:47 J -14865098.63 -14865098.55 -14865098.44 0.0078 0.0059

Mercury -45412-10-27 00:28 J -14865010.55 -14865010.48 -14865010.40 0.0078 0.0065

Mercury -45411-01-23 01:26 J -14864922.47 -14864922.44 -14864922.37 0.0078 0.0073

Venus -45411-08-12 06:42 J -14864721.40 -14864721.22 -14864721.00 0.0078 0.0033

Venus -45410-03-25 15:50 J -14864496.01 -14864495.84 -14864495.62 0.0077 0.0038

Mars -45259-05-02 05:45 J -14809305.53 -14809305.26 -14809304.99 0.0064 0.0025

Mercury -45258-04-30 03:21 J -14808942.39 -14808942.36 -14808942.30 0.0064 0.0062

Mercury -45258-07-27 04:33 J -14808854.38 -14808854.31 -14808854.22 0.0064 0.0057

Mercury -45258-10-23 05:59 J -14808766.35 -14808766.25 -14808766.15 0.0065 0.0052

Mercury -45257-01-19 06:42 J -14808678.31 -14808678.22 -14808678.09 0.0065 0.0048

Mercury -45257-04-16 07:54 J -14808590.28 -14808590.17 -14808590.02 0.0065 0.0043

Mercury -45257-07-13 09:06 J -14808502.24 -14808502.12 -14808501.96 0.0065 0.0038

Mercury -45257-10-09 10:18 J -14808414.20 -14808414.07 -14808413.91 0.0065 0.0033

Mercury -45256-01-05 11:45 J -14808326.15 -14808326.01 -14808325.85 0.0065 0.0028

Earth -45256-03-05 23:16 J -14808266.75 -14808266.53 -14808266.27 0.0065 0.0026

Moon -45256-03-06 01:40 J -14808266.67 -14808266.43 -14808266.18 0.0065 0.0025 \*

Mercury -45256-04-03 12:57 J -14808238.11 -14808237.96 -14808237.79 0.0065 0.0023

Mercury -45256-06-30 14:09 J -14808150.06 -14808149.91 -14808149.74 0.0065 0.0018

Mercury -45256-09-26 15:21 J -14808062.01 -14808061.86 -14808061.68 0.0065 0.0014

Mercury -45256-12-23 16:47 J -14807973.96 -14807973.80 -14807973.63 0.0065 0.0008

Earth -45255-03-07 12:42 J -14807900.12 -14807899.97 -14807899.79 0.0065 0.0050

Moon -45255-03-07 12:28 J -14807900.12 -14807899.98 -14807899.79 0.0065 0.0049 \*

Mercury -45255-03-21 18:14 J -14807885.91 -14807885.74 -14807885.57 0.0065 0.0003

Mercury -45255-06-17 19:26 J -14807797.86 -14807797.69 -14807797.52 0.0066 0.0003

Mercury -45255-09-13 20:38 J -14807709.81 -14807709.64 -14807709.47 0.0066 0.0008

Mercury -45255-12-10 21:50 J -14807621.75 -14807621.59 -14807621.42 0.0066 0.0013

Mercury -45254-03-08 23:16 J -14807533.69 -14807533.53 -14807533.37 0.0066 0.0018

Mercury -45254-06-05 00:14 J -14807445.64 -14807445.49 -14807445.32 0.0066 0.0024

Mercury -45254-09-01 01:40 J -14807357.57 -14807357.43 -14807357.27 0.0066 0.0029

Mercury -45254-11-28 03:06 J -14807269.51 -14807269.37 -14807269.22 0.0066 0.0034

Mercury -45253-02-24 04:04 J -14807181.45 -14807181.33 -14807181.17 0.0066 0.0041

Mercury -45253-05-22 05:30 J -14807093.38 -14807093.27 -14807093.13 0.0066 0.0046

Mercury -45253-08-18 07:11 J -14807005.31 -14807005.20 -14807005.09 0.0066 0.0051

Mercury -45253-11-14 08:09 J -14806917.23 -14806917.16 -14806917.05 0.0066 0.0057

Mercury -45252-02-10 09:21 J -14806829.14 -14806829.11 -14806829.02 0.0067 0.0063

Venus -45252-08-17 08:23 J -14806641.19 -14806641.15 -14806641.10 0.0067 0.0065

Venus -45251-03-30 12:57 J -14806416.15 -14806415.96 -14806415.74 0.0067 0.0022

Venus -45251-11-10 17:45 J -14806190.95 -14806190.76 -14806190.53 0.0067 0.0024

Mercury -45170-05-21 13:54 J -14776778.94 -14776778.92 -14776778.88 0.0080 0.0079

Mercury -45170-08-17 15:21 J -14776690.92 -14776690.86 -14776690.78 0.0080 0.0070

Mercury -45170-11-13 17:02 J -14776602.87 -14776602.79 -14776602.69 0.0080 0.0062

Mercury -45169-02-09 18:28 J -14776514.83 -14776514.73 -14776514.60 0.0080 0.0053

Mercury -45169-05-07 20:09 J -14776426.77 -14776426.66 -14776426.53 0.0080 0.0045

Mercury -45169-08-03 21:35 J -14776338.72 -14776338.60 -14776338.45 0.0080 0.0037

Earth -45169-09-07 20:38 J -14776303.79 -14776303.64 -14776303.43 0.0080 0.0057

Moon -45169-09-07 21:21 J -14776303.76 -14776303.61 -14776303.41 0.0080 0.0058 \*

Mercury -45169-10-30 23:30 J -14776250.66 -14776250.52 -14776250.38 0.0080 0.0028

Mercury -45168-01-27 00:57 J -14776162.60 -14776162.46 -14776162.32 0.0079 0.0020

Mercury -45168-04-25 02:23 J -14776074.54 -14776074.40 -14776074.25 0.0079 0.0012

Mercury -45168-07-22 03:50 J -14775986.48 -14775986.34 -14775986.19 0.0079 0.0004

Mercury -45168-10-18 05:30 J -14775898.42 -14775898.27 -14775898.13 0.0079 0.0005

Mercury -45167-01-14 06:57 J -14775810.36 -14775810.21 -14775810.07 0.0079 0.0012

Mercury -45167-04-12 08:09 J -14775722.30 -14775722.16 -14775722.01 0.0079 0.0020

Mercury -45167-07-09 09:35 J -14775634.23 -14775634.10 -14775633.96 0.0079 0.0028  
 Mercury -45167-10-05 11:16 J -14775546.16 -14775546.03 -14775545.90 0.0079 0.0035  
 Mercury -45166-01-01 12:28 J -14775458.10 -14775457.98 -14775457.85 0.0078 0.0043  
 Mercury -45166-03-30 13:40 J -14775370.03 -14775369.93 -14775369.81 0.0078 0.0050  
 Mercury -45166-06-26 15:06 J -14775281.96 -14775281.87 -14775281.76 0.0078 0.0058  
 Mercury -45166-09-22 16:18 J -14775193.88 -14775193.82 -14775193.72 0.0078 0.0065  
 Mercury -45166-12-19 17:45 J -14775105.80 -14775105.76 -14775105.69 0.0078 0.0072  
 Venus -45165-01-28 13:26 J -14775066.07 -14775065.94 -14775065.80 0.0078 0.0060  
 Venus -45165-09-09 22:47 J -14774840.77 -14774840.55 -14774840.33 0.0077 0.0010  
 Mars -45013-09-23 04:04 J -14719309.54 -14719309.33 -14719309.07 0.0064 0.0038  
 Mercury -45012-03-25 18:14 J -14719125.74 -14719125.74 -14719125.71 0.0064 0.0064  
 Mercury -45012-06-21 19:26 J -14719037.74 -14719037.69 -14719037.61 0.0064 0.0060  
 Mercury -45012-09-17 20:38 J -14718949.72 -14718949.64 -14718949.54 0.0065 0.0055  
 Mercury -45012-12-14 21:50 J -14718861.69 -14718861.59 -14718861.48 0.0065 0.0050  
 Mercury -45011-03-12 23:16 J -14718773.65 -14718773.53 -14718773.41 0.0065 0.0045  
 Mercury -45011-06-09 00:28 J -14718685.61 -14718685.48 -14718685.35 0.0065 0.0040  
 Mercury -45011-09-05 01:11 J -14718597.57 -14718597.45 -14718597.29 0.0065 0.0036  
 Mercury -45011-12-02 02:23 J -14718509.53 -14718509.40 -14718509.23 0.0065 0.0031  
 Mercury -45010-02-28 04:04 J -14718421.49 -14718421.33 -14718421.18 0.0065 0.0026  
 Moon -45010-03-08 03:06 J -14718413.61 -14718413.37 -14718413.11 0.0065 0.0020  
 Earth -45010-03-08 06:14 J -14718413.47 -14718413.24 -14718412.98 0.0065 0.0022 \*  
 Mercury -45010-05-27 05:16 J -14718333.44 -14718333.28 -14718333.12 0.0065 0.0021  
 Mercury -45010-08-23 06:28 J -14718245.39 -14718245.23 -14718245.06 0.0065 0.0016  
 Mercury -45010-11-19 07:40 J -14718157.35 -14718157.18 -14718157.01 0.0065 0.0011  
 Mercury -45009-02-15 08:52 J -14718069.29 -14718069.13 -14718068.95 0.0065 0.0006  
 Earth -45009-03-08 19:26 J -14718046.82 -14718046.69 -14718046.53 0.0065 0.0054  
 Moon -45009-03-08 23:02 J -14718046.68 -14718046.54 -14718046.36 0.0065 0.0052 \*  
 Mercury -45009-05-13 10:18 J -14717981.24 -14717981.07 -14717980.90 0.0066 0.0001  
 Mercury -45009-08-09 11:30 J -14717893.19 -14717893.02 -14717892.85 0.0066 0.0005  
 Mercury -45009-11-05 12:42 J -14717805.13 -14717804.97 -14717804.80 0.0066 0.0010

Mercury -45008-02-01 13:54 J -14717717.08 -14717716.92 -14717716.74 0.0066 0.0016

Mercury -45008-04-30 15:06 J -14717629.02 -14717628.87 -14717628.69 0.0066 0.0021

Mercury -45008-07-27 16:33 J -14717540.96 -14717540.81 -14717540.64 0.0066 0.0026

Mercury -45008-10-23 17:59 J -14717452.90 -14717452.75 -14717452.60 0.0066 0.0032

Mercury -45007-01-19 18:57 J -14717364.83 -14717364.71 -14717364.55 0.0066 0.0038

Mercury -45007-04-17 20:38 J -14717276.77 -14717276.64 -14717276.50 0.0066 0.0042

Mercury -45007-07-14 21:35 J -14717188.70 -14717188.60 -14717188.46 0.0066 0.0049

Mercury -45007-10-10 23:16 J -14717100.62 -14717100.53 -14717100.42 0.0066 0.0054

Mercury -45006-01-07 00:14 J -14717012.54 -14717012.49 -14717012.39 0.0067 0.0060

Mercury -45006-04-05 01:54 J -14716924.44 -14716924.42 -14716924.37 0.0067 0.0065

Venus -45006-09-15 20:52 J -14716760.79 -14716760.63 -14716760.44 0.0067 0.0041

Venus -45005-04-28 02:09 J -14716535.63 -14716535.41 -14716535.19 0.0067 0.0003

Venus -45005-12-09 06:57 J -14716310.35 -14716310.21 -14716310.04 0.0067 0.0048

# 45TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 45th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-44924-07-13 06:57 J	-14686874.26	-14686874.21	-14686874.13	0.0080	0.0073		
Mercury	-44924-10-09 08:52 J	-14686786.22	-14686786.13	-14686786.04	0.0080	0.0064		
Mercury	-44923-01-05 10:18 J	-14686698.17	-14686698.07	-14686697.96	0.0080	0.0055		
Mercury	-44923-04-03 11:45 J	-14686610.12	-14686610.01	-14686609.88	0.0080	0.0047		
Mercury	-44923-06-30 13:11 J	-14686522.07	-14686521.95	-14686521.81	0.0080	0.0039		

Earth -44923-09-10 06:42 J -14686450.44 -14686450.22 -14686450.01 0.0080 0.0043  
 Moon -44923-09-10 09:35 J -14686450.30 -14686450.10 -14686449.86 0.0080 0.0044 \*  
 Mercury -44923-09-26 14:52 J -14686434.01 -14686433.88 -14686433.74 0.0080 0.0030  
 Mercury -44923-12-23 16:33 J -14686345.95 -14686345.81 -14686345.67 0.0079 0.0022  
 Mercury -44922-03-21 17:59 J -14686257.89 -14686257.75 -14686257.60 0.0079 0.0014  
 Mercury -44922-06-17 19:26 J -14686169.83 -14686169.69 -14686169.54 0.0079 0.0006  
 Mercury -44922-09-13 21:06 J -14686081.77 -14686081.62 -14686081.48 0.0079 0.0003  
 Mercury -44922-12-10 22:33 J -14685993.71 -14685993.56 -14685993.42 0.0079 0.0010  
 Mercury -44921-03-07 23:45 J -14685905.65 -14685905.51 -14685905.36 0.0079 0.0018  
 Mercury -44921-06-04 01:11 J -14685817.58 -14685817.45 -14685817.30 0.0079 0.0026  
 Mercury -44921-08-31 02:23 J -14685729.52 -14685729.40 -14685729.25 0.0079 0.0034  
 Mercury -44921-11-27 04:04 J -14685641.45 -14685641.33 -14685641.20 0.0078 0.0041  
 Mercury -44920-02-23 05:16 J -14685553.38 -14685553.28 -14685553.15 0.0078 0.0048  
 Mercury -44920-05-22 06:57 J -14685465.31 -14685465.21 -14685465.11 0.0078 0.0055  
 Mercury -44920-08-18 07:54 J -14685377.24 -14685377.17 -14685377.07 0.0078 0.0063  
 Mercury -44920-11-14 09:21 J -14685289.16 -14685289.11 -14685289.04 0.0078 0.0070  
 Mercury -44919-02-10 11:02 J -14685201.06 -14685201.04 -14685201.03 0.0078 0.0077  
 Venus -44919-02-26 03:06 J -14685185.57 -14685185.37 -14685185.15 0.0078 0.0024  
 Venus -44919-10-09 12:28 J -14684960.15 -14684959.98 -14684959.79 0.0077 0.0046  
 Mercury -44766-05-18 11:02 J -14629221.07 -14629221.04 -14629220.96 0.0065 0.0061  
 Mercury -44766-08-14 12:28 J -14629133.05 -14629132.98 -14629132.89 0.0065 0.0056  
 Mercury -44766-11-10 13:40 J -14629045.02 -14629044.93 -14629044.82 0.0065 0.0051  
 Mercury -44765-02-06 14:52 J -14628956.99 -14628956.88 -14628956.76 0.0065 0.0046  
 Mercury -44765-05-04 16:04 J -14628868.95 -14628868.83 -14628868.69 0.0065 0.0041  
 Mercury -44765-07-31 17:16 J -14628780.91 -14628780.78 -14628780.63 0.0065 0.0036  
 Mercury -44765-10-27 18:28 J -14628692.87 -14628692.73 -14628692.58 0.0065 0.0031  
 Mercury -44764-01-23 19:40 J -14628604.83 -14628604.68 -14628604.52 0.0065 0.0027  
 Moon -44764-03-09 15:35 J -14628560.10 -14628559.85 -14628559.60 0.0065 0.0009  
 Earth -44764-03-09 16:47 J -14628560.06 -14628559.80 -14628559.54 0.0065 0.0011 \*  
 Mercury -44764-04-21 20:52 J -14628516.78 -14628516.63 -14628516.46 0.0065 0.0022

Mercury -44764-07-18 22:04 J -14628428.74 -14628428.58 -14628428.41 0.0065 0.0017

Mercury -44764-10-14 23:16 J -14628340.69 -14628340.53 -14628340.35 0.0065 0.0012

Mercury -44763-01-11 00:42 J -14628252.64 -14628252.47 -14628252.30 0.0066 0.0006

Moon -44763-03-11 04:47 J -14628193.35 -14628193.30 -14628193.20 0.0066 0.0063

Mercury -44763-04-09 01:54 J -14628164.59 -14628164.42 -14628164.24 0.0066 0.0002

Mercury -44763-07-06 03:06 J -14628076.53 -14628076.37 -14628076.19 0.0066 0.0005

Mercury -44763-10-02 04:33 J -14627988.48 -14627988.31 -14627988.14 0.0066 0.0010

Mercury -44763-12-29 05:45 J -14627900.42 -14627900.26 -14627900.09 0.0066 0.0015

Mercury -44762-03-27 06:57 J -14627812.36 -14627812.21 -14627812.04 0.0066 0.0020

Mercury -44762-06-23 08:09 J -14627724.30 -14627724.16 -14627723.99 0.0066 0.0026

Mercury -44762-09-19 09:35 J -14627636.24 -14627636.10 -14627635.94 0.0066 0.0031

Mercury -44762-12-16 11:02 J -14627548.18 -14627548.04 -14627547.89 0.0066 0.0037

Mercury -44761-03-13 11:59 J -14627460.11 -14627460.00 -14627459.85 0.0066 0.0043

Mercury -44761-06-09 13:26 J -14627372.04 -14627371.94 -14627371.80 0.0066 0.0048

Mercury -44761-09-05 14:38 J -14627283.97 -14627283.89 -14627283.76 0.0067 0.0054

Mercury -44761-12-02 16:18 J -14627195.89 -14627195.82 -14627195.73 0.0067 0.0059

Mercury -44760-02-28 17:30 J -14627107.79 -14627107.77 -14627107.71 0.0067 0.0065

Venus -44760-03-03 06:42 J -14627105.34 -14627105.22 -14627105.08 0.0067 0.0053

Venus -44760-10-14 11:45 J -14626880.23 -14626880.01 -14626879.79 0.0067 0.0009

Venus -44759-05-27 16:18 J -14626654.99 -14626654.82 -14626654.62 0.0067 0.0036

Mars -44679-08-20 09:06 J -14597350.45 -14597350.12 -14597349.78 0.0081 0.0018

Mercury -44678-03-12 22:04 J -14597145.58 -14597145.58 -14597145.54 0.0080 0.0080

Mercury -44678-06-08 23:59 J -14597057.57 -14597057.50 -14597057.43 0.0080 0.0071

Mercury -44678-09-05 01:26 J -14596969.52 -14596969.44 -14596969.34 0.0080 0.0062

Mercury -44678-12-02 02:52 J -14596881.48 -14596881.38 -14596881.26 0.0080 0.0054

Mercury -44677-02-28 04:47 J -14596793.42 -14596793.30 -14596793.18 0.0080 0.0045

Mercury -44677-05-26 06:14 J -14596705.37 -14596705.24 -14596705.11 0.0080 0.0037

Mercury -44677-08-22 07:40 J -14596617.31 -14596617.18 -14596617.04 0.0079 0.0029

Moon -44677-09-11 19:40 J -14596596.93 -14596596.68 -14596596.41 0.0079 0.0015

Earth -44677-09-11 21:06 J -14596596.87 -14596596.62 -14596596.36 0.0079 0.0016 \*



Mercury -44677-11-18 09:21 J -14596529.26 -14596529.11 -14596528.97 0.0079 0.0021

Mercury -44676-02-14 10:47 J -14596441.20 -14596441.05 -14596440.91 0.0079 0.0013

Mercury -44676-05-13 12:14 J -14596353.14 -14596352.99 -14596352.84 0.0079 0.0005

Mercury -44676-08-09 13:40 J -14596265.08 -14596264.93 -14596264.78 0.0079 0.0003

Mercury -44676-11-05 15:06 J -14596177.01 -14596176.87 -14596176.72 0.0079 0.0011

Mercury -44675-02-01 16:33 J -14596088.95 -14596088.81 -14596088.67 0.0079 0.0019

Mercury -44675-04-30 17:45 J -14596000.89 -14596000.76 -14596000.61 0.0079 0.0027

Mercury -44675-07-27 19:11 J -14595912.82 -14595912.70 -14595912.56 0.0078 0.0034

Mercury -44675-10-23 20:52 J -14595824.76 -14595824.63 -14595824.51 0.0078 0.0042

Mercury -44674-01-19 21:50 J -14595736.69 -14595736.59 -14595736.46 0.0078 0.0050

Mercury -44674-04-17 23:30 J -14595648.62 -14595648.52 -14595648.42 0.0078 0.0056

Mercury -44674-07-15 00:28 J -14595560.54 -14595560.48 -14595560.38 0.0078 0.0064

Venus -44674-08-14 11:02 J -14595530.22 -14595530.04 -14595529.86 0.0078 0.0045

Mercury -44674-10-11 02:09 J -14595472.46 -14595472.41 -14595472.35 0.0078 0.0071

Venus -44673-03-26 20:09 J -14595304.86 -14595304.66 -14595304.44 0.0077 0.0025

Mars -44522-08-18 14:52 J -14540008.12 -14540007.88 -14540007.62 0.0064 0.0034

Mercury -44520-04-13 02:52 J -14539404.42 -14539404.38 -14539404.34 0.0065 0.0062

Mercury -44520-07-10 03:35 J -14539316.41 -14539316.35 -14539316.26 0.0065 0.0058

Mercury -44520-10-06 04:47 J -14539228.38 -14539228.30 -14539228.19 0.0065 0.0053

Mercury -44519-01-02 05:59 J -14539140.35 -14539140.25 -14539140.12 0.0065 0.0048

Mercury -44519-03-31 07:11 J -14539052.31 -14539052.20 -14539052.06 0.0065 0.0043

Mercury -44519-06-27 08:23 J -14538964.27 -14538964.15 -14538964.00 0.0065 0.0038

Mercury -44519-09-23 09:35 J -14538876.23 -14538876.10 -14538875.94 0.0065 0.0034

Mercury -44519-12-20 11:02 J -14538788.19 -14538788.04 -14538787.88 0.0065 0.0028

Earth -44518-03-12 01:11 J -14538706.71 -14538706.45 -14538706.19 0.0065 0.0003

Moon -44518-03-12 04:33 J -14538706.57 -14538706.31 -14538706.05 0.0065 0.0001 \*

Mercury -44518-03-18 12:14 J -14538700.14 -14538699.99 -14538699.82 0.0065 0.0023

Mercury -44518-06-14 13:26 J -14538612.09 -14538611.94 -14538611.77 0.0065 0.0018

Mercury -44518-09-10 14:52 J -14538524.05 -14538523.88 -14538523.71 0.0066 0.0013

Mercury -44518-12-07 16:04 J -14538436.00 -14538435.83 -14538435.66 0.0066 0.0008

Mercury -44517-03-04 17:30 J -14538347.94 -14538347.77 -14538347.60 0.0066 0.0003

Mercury -44517-05-31 18:42 J -14538259.89 -14538259.72 -14538259.55 0.0066 0.0003

Mercury -44517-08-27 19:54 J -14538171.84 -14538171.67 -14538171.50 0.0066 0.0008

Mercury -44517-11-23 21:06 J -14538083.78 -14538083.62 -14538083.45 0.0066 0.0013

Mercury -44516-02-19 22:33 J -14537995.72 -14537995.56 -14537995.40 0.0066 0.0019

Mercury -44516-05-18 23:30 J -14537907.66 -14537907.52 -14537907.35 0.0066 0.0025

Mercury -44516-08-15 00:57 J -14537819.60 -14537819.46 -14537819.30 0.0066 0.0030

Mercury -44516-11-11 02:09 J -14537731.54 -14537731.41 -14537731.25 0.0066 0.0035

Mercury -44515-02-07 03:35 J -14537643.47 -14537643.35 -14537643.20 0.0066 0.0041

Mercury -44515-05-06 05:16 J -14537555.41 -14537555.28 -14537555.16 0.0067 0.0046

Mercury -44515-08-02 06:14 J -14537467.33 -14537467.24 -14537467.12 0.0067 0.0052

Mercury -44515-10-29 07:54 J -14537379.25 -14537379.17 -14537379.08 0.0067 0.0057

Mercury -44514-01-25 09:06 J -14537291.17 -14537291.12 -14537291.06 0.0067 0.0063

Venus -44514-04-01 20:23 J -14537224.84 -14537224.65 -14537224.44 0.0067 0.0025

Venus -44514-11-13 01:26 J -14536999.65 -14536999.44 -14536999.23 0.0067 0.0020

Venus -44513-06-25 05:59 J -14536774.29 -14536774.25 -14536774.17 0.0067 0.0065

Mercury -44432-02-05 14:23 J -14507328.91 -14507328.90 -14507328.88 0.0080 0.0080

Mercury -44432-05-04 15:50 J -14507240.89 -14507240.84 -14507240.76 0.0080 0.0071

Mercury -44432-07-31 17:16 J -14507152.85 -14507152.78 -14507152.67 0.0080 0.0063

Mercury -44432-10-27 19:11 J -14507064.80 -14507064.70 -14507064.59 0.0080 0.0054

Mercury -44431-01-23 20:38 J -14506976.75 -14506976.64 -14506976.51 0.0080 0.0046

Mercury -44431-04-21 22:18 J -14506888.70 -14506888.57 -14506888.44 0.0080 0.0038

Mercury -44431-07-18 23:45 J -14506800.64 -14506800.51 -14506800.36 0.0079 0.0030

Moon -44431-09-14 06:14 J -14506743.49 -14506743.24 -14506742.99 0.0079 0.0006

Earth -44431-09-14 09:06 J -14506743.37 -14506743.12 -14506742.86 0.0079 0.0004 \*

Mercury -44431-10-15 01:26 J -14506712.58 -14506712.44 -14506712.30 0.0079 0.0021

Mercury -44430-01-11 02:52 J -14506624.52 -14506624.38 -14506624.23 0.0079 0.0013

Mercury -44430-04-09 04:18 J -14506536.46 -14506536.32 -14506536.17 0.0079 0.0006

Mercury -44430-07-06 05:45 J -14506448.40 -14506448.26 -14506448.11 0.0079 0.0003

Mercury -44430-10-02 07:11 J -14506360.34 -14506360.20 -14506360.05 0.0079 0.0011

Mercury -44430-12-29 08:38 J -14506272.28 -14506272.14 -14506271.99 0.0079 0.0018

Mercury -44429-03-26 10:04 J -14506184.21 -14506184.08 -14506183.94 0.0078 0.0026

Mercury -44429-06-22 11:30 J -14506096.15 -14506096.02 -14506095.89 0.0078 0.0033

Mercury -44429-09-18 12:42 J -14506008.08 -14506007.97 -14506007.84 0.0078 0.0041

Mercury -44429-12-15 14:09 J -14505920.02 -14505919.91 -14505919.79 0.0078 0.0048

Venus -44428-01-29 16:33 J -14505874.85 -14505874.81 -14505874.71 0.0078 0.0074

Mercury -44428-03-13 15:21 J -14505831.95 -14505831.86 -14505831.74 0.0078 0.0056

Mercury -44428-06-09 16:47 J -14505743.87 -14505743.80 -14505743.70 0.0078 0.0063

Mercury -44428-09-05 18:14 J -14505655.79 -14505655.74 -14505655.67 0.0078 0.0070

Venus -44428-09-12 02:38 J -14505649.61 -14505649.39 -14505649.17 0.0078 0.0003

Mercury -44428-12-02 19:26 J -14505567.69 -14505567.69 -14505567.67 0.0078 0.0077

Venus -44427-04-25 11:30 J -14505424.11 -14505424.02 -14505423.89 0.0077 0.0067

Mars -44275-01-09 19:26 J -14450011.88 -14450011.69 -14450011.45 0.0064 0.0044

Mercury -44274-03-09 18:14 J -14449587.76 -14449587.74 -14449587.67 0.0065 0.0063

Mercury -44274-06-05 19:26 J -14449499.74 -14449499.69 -14449499.59 0.0065 0.0058

Mercury -44274-09-01 20:38 J -14449411.71 -14449411.64 -14449411.52 0.0065 0.0053

Mercury -44274-11-28 22:04 J -14449323.68 -14449323.58 -14449323.46 0.0065 0.0048

Mercury -44273-02-24 23:16 J -14449235.64 -14449235.53 -14449235.39 0.0065 0.0043

Earth -44273-03-11 22:18 J -14449219.58 -14449219.57 -14449219.49 0.0065 0.0064

Mercury -44273-05-23 00:28 J -14449147.60 -14449147.48 -14449147.33 0.0065 0.0038

Mercury -44273-08-19 01:40 J -14449059.56 -14449059.43 -14449059.27 0.0065 0.0033

Mercury -44273-11-15 02:52 J -14448971.52 -14448971.38 -14448971.21 0.0065 0.0029

Mercury -44272-02-11 04:04 J -14448883.47 -14448883.33 -14448883.16 0.0065 0.0024

Earth -44272-03-13 12:14 J -14448853.24 -14448852.99 -14448852.73 0.0065 0.0012

Moon -44272-03-13 12:28 J -14448853.23 -14448852.98 -14448852.71 0.0065 0.0014 \*

Mercury -44272-05-10 05:30 J -14448795.43 -14448795.27 -14448795.10 0.0066 0.0018

Mercury -44272-08-06 06:57 J -14448707.38 -14448707.21 -14448707.04 0.0066 0.0013

Mercury -44272-11-02 08:09 J -14448619.33 -14448619.16 -14448618.99 0.0066 0.0008

Mercury -44271-01-29 09:21 J -14448531.28 -14448531.11 -14448530.93 0.0066 0.0003

Mercury -44271-04-27 10:47 J -14448443.22 -14448443.05 -14448442.88 0.0066 0.0003

Mercury -44271-07-24 11:59 J -14448355.17 -14448355.00 -14448354.83 0.0066 0.0008

Mercury -44271-10-20 13:11 J -14448267.11 -14448266.95 -14448266.78 0.0066 0.0014

Mercury -44270-01-16 14:38 J -14448179.05 -14448178.89 -14448178.72 0.0066 0.0019

Mercury -44270-04-14 15:50 J -14448090.99 -14448090.84 -14448090.67 0.0066 0.0024

Mercury -44270-07-11 17:02 J -14448002.93 -14448002.79 -14448002.62 0.0066 0.0030

Mercury -44270-10-07 18:42 J -14447914.87 -14447914.72 -14447914.58 0.0066 0.0035

Mercury -44269-01-03 19:40 J -14447826.80 -14447826.68 -14447826.53 0.0067 0.0041

Mercury -44269-03-31 21:21 J -14447738.73 -14447738.61 -14447738.48 0.0067 0.0046

Mercury -44269-06-27 22:18 J -14447650.66 -14447650.57 -14447650.44 0.0067 0.0052

Venus -44269-09-17 07:11 J -14447569.38 -14447569.20 -14447569.00 0.0067 0.0034

Mercury -44269-09-23 23:30 J -14447562.58 -14447562.52 -14447562.41 0.0067 0.0058

Mercury -44269-12-21 01:11 J -14447474.49 -14447474.45 -14447474.38 0.0067 0.0063

Venus -44268-04-30 11:59 J -14447344.21 -14447344.00 -14447343.77 0.0067 0.0010

Venus -44268-12-11 16:33 J -14447118.90 -14447118.81 -14447118.65 0.0067 0.0056

Mercury -44186-01-02 07:26 J -14417512.22 -14417512.19 -14417512.14 0.0080 0.0076

Mercury -44186-03-31 08:52 J -14417424.19 -14417424.13 -14417424.04 0.0080 0.0068

Mercury -44186-06-27 10:47 J -14417336.15 -14417336.05 -14417335.95 0.0080 0.0059

Mercury -44186-09-23 12:14 J -14417248.10 -14417247.99 -14417247.87 0.0080 0.0051

Mercury -44186-12-20 13:40 J -14417160.05 -14417159.93 -14417159.80 0.0080 0.0043

Mercury -44185-03-17 15:21 J -14417071.99 -14417071.86 -14417071.72 0.0079 0.0034

Mercury -44185-06-13 16:47 J -14416983.93 -14416983.80 -14416983.66 0.0079 0.0026

Mercury -44185-09-09 18:14 J -14416895.88 -14416895.74 -14416895.59 0.0079 0.0019

Earth -44185-09-16 00:42 J -14416889.68 -14416889.47 -14416889.22 0.0079 0.0037

Moon -44185-09-16 02:52 J -14416889.59 -14416889.38 -14416889.16 0.0079 0.0040 \*

Mercury -44185-12-06 19:54 J -14416807.82 -14416807.67 -14416807.52 0.0079 0.0010

Mercury -44184-03-04 21:21 J -14416719.76 -14416719.61 -14416719.46 0.0079 0.0002

Mercury -44184-05-31 22:47 J -14416631.70 -14416631.55 -14416631.40 0.0079 0.0005

Mercury -44184-08-28 00:14 J -14416543.63 -14416543.49 -14416543.34 0.0079 0.0013

Mercury -44184-11-24 01:40 J -14416455.57 -14416455.43 -14416455.29 0.0078 0.0021

Mercury -44183-02-20 02:52 J -14416367.51 -14416367.38 -14416367.23 0.0078 0.0029

Mercury -44183-05-19 04:18 J -14416279.44 -14416279.32 -14416279.18 0.0078 0.0036

Mercury -44183-08-15 05:45 J -14416191.38 -14416191.26 -14416191.13 0.0078 0.0043

Mercury -44183-11-11 06:57 J -14416103.31 -14416103.21 -14416103.09 0.0078 0.0051

Mercury -44182-02-07 08:23 J -14416015.24 -14416015.15 -14416015.04 0.0078 0.0058

Venus -44182-02-28 11:02 J -14415994.24 -14415994.04 -14415993.81 0.0078 0.0020

Mercury -44182-05-06 09:35 J -14415927.16 -14415927.10 -14415927.01 0.0078 0.0066

Mercury -44182-08-02 11:02 J -14415839.08 -14415839.04 -14415838.98 0.0078 0.0073

Venus -44182-10-11 20:23 J -14415768.80 -14415768.65 -14415768.47 0.0077 0.0051

Mercury -44028-02-02 09:50 J -14359771.10 -14359771.09 -14359771.05 0.0065 0.0064

Mercury -44028-05-01 11:16 J -14359683.09 -14359683.03 -14359682.96 0.0065 0.0059

Mercury -44028-07-28 12:28 J -14359595.07 -14359594.98 -14359594.88 0.0065 0.0054

Mercury -44028-10-24 13:40 J -14359507.03 -14359506.93 -14359506.82 0.0065 0.0049

Mercury -44027-01-20 14:52 J -14359419.00 -14359418.88 -14359418.75 0.0065 0.0045

Earth -44027-03-14 07:26 J -14359366.31 -14359366.19 -14359366.04 0.0065 0.0056

Moon -44027-03-14 10:18 J -14359366.14 -14359366.07 -14359365.93 0.0065 0.0060 \*

Mercury -44027-04-18 16:04 J -14359330.96 -14359330.83 -14359330.69 0.0065 0.0040

Mercury -44027-07-15 17:16 J -14359242.92 -14359242.78 -14359242.63 0.0065 0.0035

Mercury -44027-10-11 18:28 J -14359154.88 -14359154.73 -14359154.57 0.0065 0.0030

Mercury -44026-01-07 19:40 J -14359066.83 -14359066.68 -14359066.52 0.0065 0.0025

Moon -44026-03-15 17:16 J -14359000.00 -14358999.78 -14358999.52 0.0066 0.0024

Earth -44026-03-15 21:06 J -14358999.86 -14358999.62 -14358999.37 0.0066 0.0020 \*

Mercury -44026-04-05 20:52 J -14358978.78 -14358978.63 -14358978.46 0.0066 0.0020

Mercury -44026-07-02 22:04 J -14358890.74 -14358890.58 -14358890.40 0.0066 0.0015

Mercury -44026-09-28 23:30 J -14358802.69 -14358802.52 -14358802.35 0.0066 0.0009

Mercury -44026-12-26 00:57 J -14358714.63 -14358714.46 -14358714.29 0.0066 0.0004

Mercury -44025-03-23 02:09 J -14358626.58 -14358626.41 -14358626.24 0.0066 0.0001

Mercury -44025-06-19 03:21 J -14358538.53 -14358538.36 -14358538.19 0.0066 0.0007

Mercury -44025-09-15 04:33 J -14358450.47 -14358450.31 -14358450.13 0.0066 0.0012

Mercury -44025-12-12 05:59 J -14358362.41 -14358362.25 -14358362.08 0.0066 0.0017

Mercury -44024-03-10 07:11 J -14358274.35 -14358274.20 -14358274.03 0.0066 0.0023

Mercury -44024-06-06 08:23 J -14358186.29 -14358186.15 -14358185.98 0.0066 0.0028

Mercury -44024-09-02 09:50 J -14358098.23 -14358098.09 -14358097.93 0.0067 0.0034

Mercury -44024-11-29 11:02 J -14358010.16 -14358010.04 -14358009.89 0.0067 0.0040

Mercury -44023-02-25 12:28 J -14357922.09 -14357921.98 -14357921.84 0.0067 0.0045

Venus -44023-03-05 16:04 J -14357913.97 -14357913.83 -14357913.67 0.0067 0.0049

Mercury -44023-05-24 13:40 J -14357834.02 -14357833.93 -14357833.80 0.0067 0.0051

Mercury -44023-08-20 15:06 J -14357745.94 -14357745.87 -14357745.76 0.0067 0.0056

Venus -44023-10-16 21:06 J -14357688.84 -14357688.62 -14357688.40 0.0067 0.0005

Mercury -44023-11-16 16:18 J -14357657.86 -14357657.82 -14357657.73 0.0067 0.0062

Venus -44022-05-30 01:54 J -14357463.59 -14357463.42 -14357463.24 0.0067 0.0040

# 44TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 44th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	-43942-12-04 10:18 J	-14328055.41	-14328055.07	-14328054.72	0.0081	0.0010		
Mercury	-43941-11-27 23:45 J	-14327695.55	-14327695.51	-14327695.46	0.0080	0.0076		
Mercury	-43940-02-24 01:11 J	-14327607.52	-14327607.45	-14327607.36	0.0080	0.0068		
Mercury	-43940-05-23 02:38 J	-14327519.47	-14327519.39	-14327519.28	0.0080	0.0060		
Mercury	-43940-08-19 04:04 J	-14327431.42	-14327431.33	-14327431.20	0.0080	0.0052		
Earth	-43940-09-16 08:23 J	-14327403.15	-14327403.15	-14327403.12	0.0080	0.0079		
Mercury	-43940-11-15 05:59 J	-14327343.37	-14327343.25	-14327343.12	0.0079	0.0043		
Mercury	-43939-02-11 07:26 J	-14327255.32	-14327255.19	-14327255.05	0.0079	0.0035		

Mercury -43939-05-10 09:06 J -14327167.26 -14327167.12 -14327166.98 0.0079 0.0027

Mercury -43939-08-06 10:33 J -14327079.20 -14327079.06 -14327078.92 0.0079 0.0019

Earth -43939-09-18 12:14 J -14327036.14 -14327035.99 -14327035.78 0.0079 0.0057

Moon -43939-09-18 15:06 J -14327036.01 -14327035.87 -14327035.67 0.0079 0.0060 \*

Mercury -43939-11-02 11:59 J -14326991.15 -14326991.00 -14326990.85 0.0079 0.0011

Mercury -43938-01-29 13:26 J -14326903.09 -14326902.94 -14326902.79 0.0079 0.0003

Mercury -43938-04-27 14:52 J -14326815.03 -14326814.88 -14326814.73 0.0079 0.0005

Mercury -43938-07-24 16:18 J -14326726.96 -14326726.82 -14326726.67 0.0079 0.0013

Mercury -43938-10-20 17:45 J -14326638.90 -14326638.76 -14326638.62 0.0078 0.0021

Mercury -43937-01-16 18:57 J -14326550.84 -14326550.71 -14326550.56 0.0078 0.0029

Mercury -43937-04-13 20:38 J -14326462.77 -14326462.64 -14326462.51 0.0078 0.0036

Mercury -43937-07-10 21:50 J -14326374.71 -14326374.59 -14326374.46 0.0078 0.0043

Venus -43937-08-15 16:47 J -14326338.96 -14326338.80 -14326338.60 0.0078 0.0047

Mercury -43937-10-06 23:02 J -14326286.64 -14326286.54 -14326286.42 0.0078 0.0051

Mercury -43936-01-03 00:28 J -14326198.57 -14326198.48 -14326198.37 0.0078 0.0058

Venus -43936-03-29 02:38 J -14326113.60 -14326113.39 -14326113.17 0.0078 0.0024

Mercury -43936-04-01 01:54 J -14326110.49 -14326110.42 -14326110.34 0.0078 0.0065

Mercury -43936-06-28 03:21 J -14326022.41 -14326022.36 -14326022.31 0.0077 0.0072

Mars -43785-12-04 06:28 J -14270710.46 -14270710.23 -14270709.96 0.0064 0.0032

Mercury -43782-03-28 02:23 J -14269866.43 -14269866.40 -14269866.32 0.0065 0.0061

Mercury -43782-06-24 03:35 J -14269778.41 -14269778.35 -14269778.24 0.0065 0.0056

Mercury -43782-09-20 04:47 J -14269690.38 -14269690.30 -14269690.17 0.0065 0.0052

Mercury -43782-12-17 05:59 J -14269602.35 -14269602.25 -14269602.11 0.0065 0.0047

Mercury -43781-03-14 07:26 J -14269514.31 -14269514.19 -14269514.05 0.0065 0.0041

Earth -43781-03-15 16:18 J -14269512.98 -14269512.82 -14269512.62 0.0065 0.0047

Moon -43781-03-15 18:14 J -14269512.91 -14269512.74 -14269512.57 0.0065 0.0050 \*

Mercury -43781-06-10 08:38 J -14269426.27 -14269426.14 -14269425.99 0.0065 0.0036

Mercury -43781-09-06 09:50 J -14269338.23 -14269338.09 -14269337.93 0.0065 0.0031

Mercury -43781-12-03 11:16 J -14269250.18 -14269250.03 -14269249.87 0.0066 0.0026

Mercury -43780-03-01 12:28 J -14269162.13 -14269161.98 -14269161.81 0.0066 0.0021

Earth -43780-03-17 05:59 J -14269146.47 -14269146.25 -14269146.00 0.0066 0.0030  
 Moon -43780-03-17 06:28 J -14269146.42 -14269146.23 -14269145.99 0.0066 0.0033 \*  
 Mercury -43780-05-28 13:40 J -14269074.09 -14269073.93 -14269073.76 0.0066 0.0016  
 Mercury -43780-08-24 14:52 J -14268986.04 -14268985.88 -14268985.70 0.0066 0.0011  
 Mercury -43780-11-20 16:18 J -14268897.99 -14268897.82 -14268897.65 0.0066 0.0005  
 Mercury -43779-02-16 17:30 J -14268809.93 -14268809.77 -14268809.59 0.0066 0.0002  
 Mercury -43779-05-15 18:57 J -14268721.88 -14268721.71 -14268721.54 0.0066 0.0005  
 Mercury -43779-08-11 20:09 J -14268633.83 -14268633.66 -14268633.49 0.0066 0.0011  
 Mercury -43779-11-07 21:21 J -14268545.77 -14268545.61 -14268545.44 0.0066 0.0016  
 Mercury -43778-02-03 22:47 J -14268457.71 -14268457.55 -14268457.39 0.0066 0.0022  
 Mercury -43778-05-03 00:14 J -14268369.65 -14268369.49 -14268369.34 0.0066 0.0027  
 Mercury -43778-07-30 01:11 J -14268281.58 -14268281.45 -14268281.29 0.0067 0.0033  
 Venus -43778-08-22 00:57 J -14268258.50 -14268258.46 -14268258.36 0.0067 0.0063  
 Mercury -43778-10-26 02:52 J -14268193.52 -14268193.38 -14268193.24 0.0067 0.0038  
 Mercury -43777-01-22 03:50 J -14268105.45 -14268105.34 -14268105.19 0.0067 0.0044  
 Venus -43777-04-03 06:14 J -14268033.44 -14268033.24 -14268033.02 0.0067 0.0019  
 Mercury -43777-04-19 05:30 J -14268017.38 -14268017.27 -14268017.15 0.0067 0.0049  
 Mercury -43777-07-16 06:42 J -14267929.30 -14267929.22 -14267929.11 0.0067 0.0055  
 Mercury -43777-10-12 07:54 J -14267841.22 -14267841.17 -14267841.08 0.0067 0.0061  
 Venus -43777-11-14 11:02 J -14267808.24 -14267808.04 -14267807.83 0.0067 0.0026  
 Mercury -43776-01-08 09:35 J -14267753.11 -14267753.10 -14267753.07 0.0067 0.0067  
 Mercury -43695-10-24 16:18 J -14237878.86 -14237878.82 -14237878.76 0.0080 0.0075  
 Mercury -43694-01-20 17:45 J -14237790.83 -14237790.76 -14237790.67 0.0080 0.0067  
 Mercury -43694-04-18 19:11 J -14237702.78 -14237702.70 -14237702.58 0.0080 0.0059  
 Mercury -43694-07-15 20:52 J -14237614.73 -14237614.63 -14237614.50 0.0079 0.0050  
 Earth -43694-09-18 22:33 J -14237549.73 -14237549.56 -14237549.34 0.0079 0.0053  
 Moon -43694-09-18 23:30 J -14237549.67 -14237549.52 -14237549.32 0.0079 0.0057 \*  
 Mercury -43694-10-11 22:47 J -14237526.68 -14237526.55 -14237526.43 0.0079 0.0042  
 Mercury -43693-01-08 00:14 J -14237438.63 -14237438.49 -14237438.36 0.0079 0.0034  
 Mercury -43693-04-05 01:40 J -14237350.57 -14237350.43 -14237350.29 0.0079 0.0026



Mercury -43693-07-02 03:06 J -14237262.51 -14237262.37 -14237262.22 0.0079 0.0018

Mercury -43693-09-28 04:33 J -14237174.45 -14237174.31 -14237174.16 0.0079 0.0010

Mercury -43693-12-25 05:59 J -14237086.39 -14237086.25 -14237086.10 0.0079 0.0003

Mercury -43692-03-23 07:26 J -14236998.33 -14236998.19 -14236998.04 0.0079 0.0006

Mercury -43692-06-19 08:52 J -14236910.27 -14236910.13 -14236909.98 0.0078 0.0014

Mercury -43692-09-15 10:18 J -14236822.21 -14236822.07 -14236821.93 0.0078 0.0021

Mercury -43692-12-12 11:30 J -14236734.15 -14236734.02 -14236733.87 0.0078 0.0029

Venus -43691-02-01 00:14 J -14236683.57 -14236683.49 -14236683.37 0.0078 0.0069

Mercury -43691-03-10 13:11 J -14236646.08 -14236645.95 -14236645.82 0.0078 0.0036

Mercury -43691-06-06 14:23 J -14236558.01 -14236557.90 -14236557.77 0.0078 0.0044

Mercury -43691-09-02 15:50 J -14236469.95 -14236469.84 -14236469.73 0.0078 0.0051

Venus -43691-09-14 10:04 J -14236458.30 -14236458.08 -14236457.85 0.0078 0.0003

Mercury -43691-11-29 17:02 J -14236381.88 -14236381.79 -14236381.69 0.0078 0.0059

Mercury -43690-02-25 18:14 J -14236293.80 -14236293.74 -14236293.65 0.0077 0.0066

Venus -43690-04-27 19:26 J -14236232.77 -14236232.69 -14236232.61 0.0077 0.0072

Mercury -43690-05-24 19:40 J -14236205.72 -14236205.68 -14236205.62 0.0077 0.0073

Mars -43538-04-28 01:40 J -14180714.68 -14180714.43 -14180714.14 0.0064 0.0025

Mercury -43536-02-20 17:16 J -14180049.79 -14180049.78 -14180049.75 0.0065 0.0064

Mercury -43536-05-19 18:28 J -14179961.79 -14179961.73 -14179961.65 0.0065 0.0059

Mercury -43536-08-15 19:40 J -14179873.76 -14179873.68 -14179873.58 0.0065 0.0055

Mercury -43536-11-11 21:06 J -14179785.73 -14179785.62 -14179785.51 0.0065 0.0050

Mercury -43535-02-07 22:18 J -14179697.69 -14179697.57 -14179697.45 0.0065 0.0045

Moon -43535-03-17 18:14 J -14179659.89 -14179659.74 -14179659.54 0.0065 0.0049

Earth -43535-03-17 21:50 J -14179659.75 -14179659.59 -14179659.38 0.0065 0.0046 \*

Mercury -43535-05-06 23:30 J -14179609.65 -14179609.52 -14179609.39 0.0065 0.0040

Mercury -43535-08-03 00:42 J -14179521.61 -14179521.47 -14179521.33 0.0065 0.0035

Mercury -43535-10-30 01:54 J -14179433.57 -14179433.42 -14179433.27 0.0066 0.0030

Mercury -43534-01-26 03:06 J -14179345.52 -14179345.37 -14179345.21 0.0066 0.0025

Earth -43534-03-19 11:45 J -14179293.23 -14179293.01 -14179292.77 0.0066 0.0030

Moon -43534-03-19 14:52 J -14179293.09 -14179292.88 -14179292.63 0.0066 0.0033 \*

Mercury -43534-04-24 04:18 J -14179257.48 -14179257.32 -14179257.15 0.0066 0.0020

Mercury -43534-07-21 05:30 J -14179169.43 -14179169.27 -14179169.10 0.0066 0.0015

Mercury -43534-10-17 06:57 J -14179081.38 -14179081.21 -14179081.04 0.0066 0.0009

Mercury -43533-01-13 08:09 J -14178993.33 -14178993.16 -14178992.99 0.0066 0.0004

Mercury -43533-04-10 09:35 J -14178905.27 -14178905.10 -14178904.93 0.0066 0.0002

Mercury -43533-07-07 10:47 J -14178817.22 -14178817.05 -14178816.88 0.0066 0.0007

Mercury -43533-10-03 11:59 J -14178729.16 -14178729.00 -14178728.83 0.0066 0.0012

Mercury -43533-12-30 13:26 J -14178641.10 -14178640.94 -14178640.77 0.0066 0.0017

Mercury -43532-03-28 14:52 J -14178553.04 -14178552.88 -14178552.72 0.0066 0.0023

Mercury -43532-06-24 15:50 J -14178464.98 -14178464.84 -14178464.67 0.0067 0.0029

Venus -43532-09-19 13:26 J -14178378.11 -14178377.94 -14178377.76 0.0067 0.0041

Mercury -43532-09-20 17:30 J -14178376.92 -14178376.77 -14178376.62 0.0067 0.0034

Mercury -43532-12-17 18:28 J -14178288.85 -14178288.73 -14178288.58 0.0067 0.0040

Mercury -43531-03-15 20:09 J -14178200.78 -14178200.66 -14178200.53 0.0067 0.0045

Venus -43531-05-02 18:14 J -14178152.96 -14178152.74 -14178152.52 0.0067 0.0003

Mercury -43531-06-11 21:21 J -14178112.71 -14178112.61 -14178112.49 0.0067 0.0051

Mercury -43531-09-07 22:33 J -14178024.63 -14178024.56 -14178024.45 0.0067 0.0057

Mercury -43531-12-05 00:14 J -14177936.54 -14177936.49 -14177936.42 0.0067 0.0063

Venus -43531-12-13 23:02 J -14177927.69 -14177927.54 -14177927.38 0.0067 0.0048

Mercury -43449-09-19 07:11 J -14148062.20 -14148062.20 -14148062.18 0.0080 0.0080

Mercury -43449-12-16 08:52 J -14147974.19 -14147974.13 -14147974.06 0.0080 0.0071

Mercury -43448-03-14 10:18 J -14147886.15 -14147886.07 -14147885.97 0.0080 0.0063

Mercury -43448-06-10 11:45 J -14147798.10 -14147798.01 -14147797.89 0.0079 0.0055

Mercury -43448-09-06 13:26 J -14147710.05 -14147709.94 -14147709.81 0.0079 0.0046

Earth -43448-09-20 04:33 J -14147696.49 -14147696.31 -14147696.09 0.0079 0.0050

Moon -43448-09-20 08:09 J -14147696.33 -14147696.16 -14147695.95 0.0079 0.0054 \*

Mercury -43448-12-03 14:52 J -14147622.00 -14147621.88 -14147621.74 0.0079 0.0038

Mercury -43447-03-01 16:33 J -14147533.94 -14147533.81 -14147533.67 0.0079 0.0030

Mercury -43447-05-28 17:59 J -14147445.89 -14147445.75 -14147445.60 0.0079 0.0022

Mercury -43447-08-24 19:40 J -14147357.83 -14147357.68 -14147357.54 0.0079 0.0014

Mercury -43447-11-20 21:06 J -14147269.77 -14147269.62 -14147269.47 0.0079 0.0006

Mercury -43446-02-16 22:33 J -14147181.71 -14147181.56 -14147181.41 0.0079 0.0002

Mercury -43446-05-15 23:59 J -14147093.65 -14147093.50 -14147093.35 0.0078 0.0010

Mercury -43446-08-12 01:11 J -14147005.59 -14147005.45 -14147005.30 0.0078 0.0018

Mercury -43446-11-08 02:38 J -14146917.52 -14146917.39 -14146917.24 0.0078 0.0025

Mercury -43445-02-04 04:04 J -14146829.46 -14146829.33 -14146829.19 0.0078 0.0032

Venus -43445-03-01 12:42 J -14146803.15 -14146802.97 -14146802.77 0.0078 0.0039

Mercury -43445-05-02 05:16 J -14146741.39 -14146741.28 -14146741.14 0.0078 0.0040

Mercury -43445-07-29 06:57 J -14146653.33 -14146653.21 -14146653.10 0.0078 0.0047

Venus -43445-10-12 22:04 J -14146577.77 -14146577.58 -14146577.36 0.0078 0.0032

Mercury -43445-10-25 07:54 J -14146565.26 -14146565.17 -14146565.05 0.0078 0.0055

Mercury -43444-01-21 09:21 J -14146477.19 -14146477.11 -14146477.01 0.0077 0.0062

Mercury -43444-04-19 10:47 J -14146389.11 -14146389.05 -14146388.98 0.0077 0.0069

Mercury -43444-07-16 12:14 J -14146301.01 -14146300.99 -14146300.96 0.0077 0.0076

Mercury -43290-04-15 08:52 J -14090145.16 -14090145.13 -14090145.08 0.0065 0.0063

Mercury -43290-07-12 10:04 J -14090057.14 -14090057.08 -14090057.00 0.0065 0.0058

Mercury -43290-10-08 11:16 J -14089969.11 -14089969.03 -14089968.93 0.0065 0.0054

Mercury -43289-01-04 12:28 J -14089881.08 -14089880.98 -14089880.86 0.0065 0.0049

Moon -43289-03-19 01:54 J -14089806.55 -14089806.42 -14089806.22 0.0065 0.0050

Earth -43289-03-19 02:52 J -14089806.54 -14089806.38 -14089806.18 0.0065 0.0047 \*

Mercury -43289-04-01 13:40 J -14089793.04 -14089792.93 -14089792.80 0.0065 0.0044

Mercury -43289-06-28 14:52 J -14089705.00 -14089704.88 -14089704.73 0.0065 0.0039

Mercury -43289-09-24 16:04 J -14089616.96 -14089616.83 -14089616.67 0.0066 0.0034

Mercury -43289-12-21 17:16 J -14089528.92 -14089528.78 -14089528.62 0.0066 0.0029

Mercury -43288-03-19 18:28 J -14089440.87 -14089440.73 -14089440.56 0.0066 0.0024

Moon -43288-03-20 15:06 J -14089440.10 -14089439.87 -14089439.63 0.0066 0.0031

Earth -43288-03-20 16:33 J -14089440.02 -14089439.81 -14089439.56 0.0066 0.0030 \*

Mercury -43288-06-15 19:54 J -14089352.83 -14089352.67 -14089352.50 0.0066 0.0018

Mercury -43288-09-11 21:21 J -14089264.78 -14089264.61 -14089264.44 0.0066 0.0013

Mercury -43288-12-08 22:33 J -14089176.73 -14089176.56 -14089176.39 0.0066 0.0008

Mercury -43287-03-06 23:59 J -14089088.67 -14089088.50 -14089088.33 0.0066 0.0003  
 Mercury -43287-06-03 01:11 J -14089000.62 -14089000.45 -14089000.28 0.0066 0.0003  
 Mercury -43287-08-30 02:23 J -14088912.56 -14088912.40 -14088912.23 0.0066 0.0008  
 Mercury -43287-11-26 03:50 J -14088824.51 -14088824.34 -14088824.17 0.0066 0.0013  
 Mercury -43286-02-22 05:02 J -14088736.45 -14088736.29 -14088736.12 0.0066 0.0019  
 Venus -43286-03-07 19:54 J -14088722.71 -14088722.67 -14088722.59 0.0066 0.0064  
 Mercury -43286-05-21 06:14 J -14088648.39 -14088648.24 -14088648.07 0.0067 0.0025  
 Mercury -43286-08-17 07:40 J -14088560.33 -14088560.18 -14088560.02 0.0067 0.0030  
 Venus -43286-10-19 00:57 J -14088497.67 -14088497.46 -14088497.25 0.0067 0.0020  
 Mercury -43286-11-13 08:52 J -14088472.26 -14088472.13 -14088471.97 0.0067 0.0036  
 Mercury -43285-02-09 10:18 J -14088384.19 -14088384.07 -14088383.92 0.0067 0.0041  
 Mercury -43285-05-07 11:30 J -14088296.12 -14088296.02 -14088295.88 0.0067 0.0047  
 Venus -43285-05-31 05:30 J -14088272.47 -14088272.27 -14088272.06 0.0067 0.0024  
 Mercury -43285-08-03 13:11 J -14088208.05 -14088207.95 -14088207.84 0.0067 0.0053  
 Mercury -43285-10-30 14:23 J -14088119.97 -14088119.90 -14088119.80 0.0067 0.0058  
 Mercury -43284-01-26 15:35 J -14088031.88 -14088031.85 -14088031.78 0.0067 0.0065  
 Mars -43204-03-18 00:42 J -14058761.47 -14058761.47 -14058761.43 0.0081 0.0081  
 Mercury -43203-11-11 23:59 J -14058157.55 -14058157.50 -14058157.45 0.0080 0.0075  
 Mercury -43202-02-08 01:11 J -14058069.52 -14058069.45 -14058069.36 0.0080 0.0067  
 Mercury -43202-05-07 02:52 J -14057981.47 -14057981.38 -14057981.27 0.0079 0.0059  
 Mercury -43202-08-03 04:18 J -14057893.42 -14057893.32 -14057893.19 0.0079 0.0050  
 Moon -43202-09-22 09:35 J -14057843.30 -14057843.10 -14057842.88 0.0079 0.0049  
 Earth -43202-09-22 11:16 J -14057843.23 -14057843.03 -14057842.81 0.0079 0.0045 \*  
 Mercury -43202-10-30 05:45 J -14057805.37 -14057805.26 -14057805.12 0.0079 0.0043  
 Mercury -43201-01-26 07:26 J -14057717.32 -14057717.19 -14057717.05 0.0079 0.0034  
 Mercury -43201-04-23 08:52 J -14057629.26 -14057629.13 -14057628.98 0.0079 0.0026  
 Mercury -43201-07-20 10:33 J -14057541.20 -14057541.06 -14057540.91 0.0079 0.0018  
 Mercury -43201-10-16 11:59 J -14057453.14 -14057453.00 -14057452.85 0.0079 0.0010  
 Mercury -43200-01-12 13:26 J -14057365.08 -14057364.94 -14057364.79 0.0079 0.0003  
 Mercury -43200-04-10 14:52 J -14057277.02 -14057276.88 -14057276.73 0.0078 0.0006

Mercury -43200-07-07 16:18 J -14057188.96 -14057188.82 -14057188.67 0.0078 0.0013

Mercury -43200-10-03 17:45 J -14057100.90 -14057100.76 -14057100.62 0.0078 0.0021

Mercury -43200-12-30 19:11 J -14057012.84 -14057012.70 -14057012.56 0.0078 0.0028

Mercury -43199-03-28 20:23 J -14056924.77 -14056924.65 -14056924.51 0.0078 0.0036

Venus -43199-03-31 01:11 J -14056922.67 -14056922.45 -14056922.23 0.0078 0.0009

Mercury -43199-06-24 22:04 J -14056836.70 -14056836.58 -14056836.46 0.0078 0.0043

Mercury -43199-09-20 23:02 J -14056748.64 -14056748.54 -14056748.42 0.0078 0.0051

Venus -43199-11-11 10:33 J -14056697.18 -14056697.06 -14056696.92 0.0077 0.0062

Mercury -43199-12-18 00:28 J -14056660.57 -14056660.48 -14056660.37 0.0077 0.0058

Mercury -43198-03-16 01:54 J -14056572.49 -14056572.42 -14056572.34 0.0077 0.0065

Mercury -43198-06-12 02:52 J -14056484.41 -14056484.38 -14056484.31 0.0077 0.0073

Mercury -43044-06-06 23:59 J -14000240.52 -14000240.50 -14000240.45 0.0065 0.0063

Mercury -43044-09-03 01:26 J -14000152.51 -14000152.44 -14000152.37 0.0065 0.0059

Mercury -43044-11-30 02:38 J -14000064.48 -14000064.39 -14000064.30 0.0065 0.0054

Mercury -43043-02-26 03:50 J -13999976.45 -13999976.34 -13999976.23 0.0065 0.0049

Earth -43043-03-21 05:59 J -13999953.40 -13999953.25 -13999953.08 0.0065 0.0052

Moon -43043-03-21 09:35 J -13999953.23 -13999953.10 -13999952.94 0.0065 0.0054 \*

Mercury -43043-05-25 04:47 J -13999888.42 -13999888.30 -13999888.17 0.0065 0.0044

Mercury -43043-08-21 05:59 J -13999800.38 -13999800.25 -13999800.11 0.0065 0.0039

Mercury -43043-11-17 07:11 J -13999712.33 -13999712.20 -13999712.05 0.0066 0.0034

Mercury -43042-02-13 08:23 J -13999624.29 -13999624.15 -13999623.99 0.0066 0.0029

Moon -43042-03-22 16:33 J -13999587.03 -13999586.81 -13999586.56 0.0066 0.0026

Earth -43042-03-22 19:26 J -13999586.91 -13999586.69 -13999586.43 0.0066 0.0025 \*

Mercury -43042-05-12 09:35 J -13999536.24 -13999536.10 -13999535.93 0.0066 0.0024

Mercury -43042-08-08 10:47 J -13999448.20 -13999448.05 -13999447.87 0.0066 0.0019

Mercury -43042-11-04 12:28 J -13999360.15 -13999359.98 -13999359.82 0.0066 0.0013

Mercury -43041-01-31 13:40 J -13999272.10 -13999271.93 -13999271.76 0.0066 0.0008

Mercury -43041-04-28 14:52 J -13999184.04 -13999183.88 -13999183.70 0.0066 0.0003

Mercury -43041-07-25 16:18 J -13999095.99 -13999095.82 -13999095.65 0.0066 0.0003

Mercury -43041-10-21 17:30 J -13999007.94 -13999007.77 -13999007.60 0.0066 0.0008

Mercury -43040-01-17 18:42 J -13998919.88 -13998919.72 -13998919.54 0.0066 0.0014

Venus -43040-04-05 05:59 J -13998842.38 -13998842.25 -13998842.08 0.0067 0.0048

Mercury -43040-04-15 20:09 J -13998831.82 -13998831.66 -13998831.49 0.0067 0.0019

Mercury -43040-07-12 21:21 J -13998743.76 -13998743.61 -13998743.44 0.0067 0.0025

Mercury -43040-10-08 22:47 J -13998655.70 -13998655.55 -13998655.39 0.0067 0.0030

Venus -43040-11-16 11:02 J -13998617.25 -13998617.04 -13998616.82 0.0067 0.0004

Mercury -43039-01-04 23:59 J -13998567.63 -13998567.50 -13998567.34 0.0067 0.0036

Mercury -43039-04-03 01:26 J -13998479.56 -13998479.44 -13998479.29 0.0067 0.0041

Venus -43039-06-29 15:50 J -13998392.01 -13998391.84 -13998391.66 0.0067 0.0040

Mercury -43039-06-30 02:38 J -13998391.49 -13998391.39 -13998391.25 0.0067 0.0047

Mercury -43039-09-26 04:18 J -13998303.42 -13998303.32 -13998303.21 0.0067 0.0053

Mercury -43039-12-23 05:30 J -13998215.34 -13998215.27 -13998215.17 0.0067 0.0059

Mercury -43038-03-21 06:42 J -13998127.24 -13998127.22 -13998127.15 0.0067 0.0065

# 43RD MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 43rd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	-42958-08-09 16:18 J	-13968766.14	-13968765.82	-13968765.48	0.0080	0.0023		
Mercury	-42956-01-03 15:35 J	-13968252.89	-13968252.85	-13968252.80	0.0080	0.0075		
Mercury	-42956-04-01 17:02 J	-13968164.86	-13968164.79	-13968164.70	0.0080	0.0067		
Mercury	-42956-06-28 18:28 J	-13968076.82	-13968076.73	-13968076.62	0.0079	0.0059		
Moon	-42956-09-23 09:35 J	-13967990.23	-13967990.10	-13967989.90	0.0079	0.0061		

Earth -42956-09-23 13:26 J -13967990.12 -13967989.94 -13967989.76 0.0079 0.0056 \*  
 Mercury -42956-09-24 19:54 J -13967988.77 -13967988.67 -13967988.54 0.0079 0.0051  
 Mercury -42956-12-21 21:35 J -13967900.72 -13967900.60 -13967900.47 0.0079 0.0042  
 Mercury -42955-03-19 23:02 J -13967812.66 -13967812.54 -13967812.40 0.0079 0.0034  
 Mercury -42955-06-16 00:42 J -13967724.61 -13967724.47 -13967724.33 0.0079 0.0026  
 Mercury -42955-09-12 02:09 J -13967636.55 -13967636.41 -13967636.26 0.0079 0.0018  
 Earth -42955-09-25 16:33 J -13967622.81 -13967622.81 -13967622.77 0.0079 0.0079  
 Mercury -42955-12-09 03:35 J -13967548.49 -13967548.35 -13967548.20 0.0079 0.0010  
 Mercury -42954-03-07 05:02 J -13967460.43 -13967460.29 -13967460.14 0.0078 0.0003  
 Mercury -42954-06-03 06:28 J -13967372.37 -13967372.23 -13967372.08 0.0078 0.0006  
 Mercury -42954-08-30 07:54 J -13967284.31 -13967284.17 -13967284.02 0.0078 0.0013  
 Venus -42954-09-16 00:42 J -13967267.59 -13967267.47 -13967267.32 0.0078 0.0063  
 Mercury -42954-11-26 09:06 J -13967196.25 -13967196.12 -13967195.97 0.0078 0.0021  
 Mercury -42953-02-22 10:47 J -13967108.19 -13967108.05 -13967107.91 0.0078 0.0028  
 Venus -42953-04-28 10:33 J -13967042.28 -13967042.06 -13967041.83 0.0078 0.0009  
 Mercury -42953-05-20 11:59 J -13967020.12 -13967020.00 -13967019.86 0.0078 0.0036  
 Mercury -42953-08-16 13:26 J -13966932.06 -13966931.94 -13966931.82 0.0078 0.0043  
 Mercury -42953-11-12 14:38 J -13966843.99 -13966843.89 -13966843.77 0.0077 0.0050  
 Mercury -42952-02-08 16:04 J -13966755.92 -13966755.83 -13966755.73 0.0077 0.0058  
 Mercury -42952-05-07 17:30 J -13966667.85 -13966667.77 -13966667.69 0.0077 0.0065  
 Mercury -42952-08-03 18:28 J -13966579.77 -13966579.73 -13966579.66 0.0077 0.0072  
 Mars -42801-08-12 14:23 J -13911418.12 -13911417.90 -13911417.64 0.0064 0.0036  
 Mercury -42798-07-30 15:06 J -13910335.88 -13910335.87 -13910335.82 0.0065 0.0064  
 Mercury -42798-10-26 16:18 J -13910247.87 -13910247.82 -13910247.73 0.0065 0.0059  
 Mercury -42797-01-22 17:30 J -13910159.84 -13910159.77 -13910159.66 0.0065 0.0055  
 Moon -42797-03-22 08:52 J -13910100.22 -13910100.13 -13910099.96 0.0065 0.0058  
 Earth -42797-03-22 09:21 J -13910100.21 -13910100.11 -13910099.94 0.0065 0.0057 \*  
 Mercury -42797-04-19 18:42 J -13910071.81 -13910071.72 -13910071.59 0.0065 0.0050  
 Mercury -42797-07-16 19:54 J -13909983.77 -13909983.67 -13909983.52 0.0065 0.0045  
 Mercury -42797-10-12 21:35 J -13909895.73 -13909895.60 -13909895.46 0.0066 0.0039

Mercury -42796-01-08 22:47 J -13909807.69 -13909807.55 -13909807.40 0.0066 0.0034

Earth -42796-03-23 23:45 J -13909733.75 -13909733.51 -13909733.26 0.0066 0.0020

Moon -42796-03-24 02:09 J -13909733.64 -13909733.41 -13909733.16 0.0066 0.0020 \*

Mercury -42796-04-06 23:59 J -13909719.65 -13909719.50 -13909719.34 0.0066 0.0029

Mercury -42796-07-04 01:11 J -13909631.60 -13909631.45 -13909631.28 0.0066 0.0024

Mercury -42796-09-30 02:23 J -13909543.55 -13909543.40 -13909543.23 0.0066 0.0019

Mercury -42796-12-27 03:50 J -13909455.50 -13909455.34 -13909455.17 0.0066 0.0013

Mercury -42795-03-25 05:02 J -13909367.45 -13909367.29 -13909367.12 0.0066 0.0008

Mercury -42795-06-21 06:28 J -13909279.40 -13909279.23 -13909279.06 0.0066 0.0003

Mercury -42795-09-17 07:40 J -13909191.35 -13909191.18 -13909191.01 0.0066 0.0003

Mercury -42795-12-14 08:52 J -13909103.29 -13909103.13 -13909102.95 0.0066 0.0009

Mercury -42794-03-12 10:18 J -13909015.24 -13909015.07 -13909014.90 0.0067 0.0014

Venus -42794-05-04 17:16 J -13908961.98 -13908961.78 -13908961.59 0.0067 0.0030

Mercury -42794-06-08 11:45 J -13908927.18 -13908927.01 -13908926.85 0.0067 0.0019

Mercury -42794-09-04 12:42 J -13908839.12 -13908838.97 -13908838.80 0.0067 0.0025

Mercury -42794-12-01 14:23 J -13908751.05 -13908750.90 -13908750.75 0.0067 0.0030

Venus -42794-12-15 21:50 J -13908736.80 -13908736.59 -13908736.37 0.0067 0.0014

Mercury -42793-02-27 15:21 J -13908662.99 -13908662.86 -13908662.70 0.0067 0.0036

Mercury -42793-05-25 17:02 J -13908574.92 -13908574.79 -13908574.65 0.0067 0.0042

Venus -42793-07-28 02:38 J -13908511.49 -13908511.39 -13908511.28 0.0067 0.0058

Mercury -42793-08-21 18:14 J -13908486.85 -13908486.74 -13908486.61 0.0067 0.0047

Mercury -42793-11-17 19:26 J -13908398.77 -13908398.69 -13908398.57 0.0067 0.0053

Mercury -42792-02-13 21:21 J -13908310.69 -13908310.61 -13908310.53 0.0067 0.0059

Mercury -42792-05-12 22:33 J -13908222.60 -13908222.56 -13908222.51 0.0067 0.0065

Mercury -42710-02-26 07:40 J -13878348.23 -13878348.18 -13878348.11 0.0079 0.0072

Mercury -42710-05-25 09:06 J -13878260.19 -13878260.12 -13878260.02 0.0079 0.0064

Mercury -42710-08-21 11:02 J -13878172.15 -13878172.04 -13878171.94 0.0079 0.0056

Earth -42710-09-25 18:14 J -13878136.91 -13878136.74 -13878136.54 0.0079 0.0056

Moon -42710-09-25 20:52 J -13878136.79 -13878136.63 -13878136.46 0.0079 0.0060 \*

Mercury -42710-11-17 12:28 J -13878084.10 -13878083.98 -13878083.86 0.0079 0.0047



Mercury -42709-02-13 13:54 J -13877996.04 -13877995.92 -13877995.79 0.0079 0.0039

Mercury -42709-05-11 15:35 J -13877907.99 -13877907.85 -13877907.72 0.0079 0.0031

Mercury -42709-08-07 16:47 J -13877819.93 -13877819.80 -13877819.65 0.0079 0.0024

Earth -42709-09-26 21:35 J -13877769.61 -13877769.60 -13877769.53 0.0079 0.0078

Mercury -42709-11-03 18:28 J -13877731.88 -13877731.73 -13877731.59 0.0079 0.0015

Mercury -42708-01-30 19:54 J -13877643.82 -13877643.67 -13877643.52 0.0078 0.0008

Mercury -42708-04-28 21:21 J -13877555.76 -13877555.61 -13877555.46 0.0078 0.0000

Mercury -42708-07-25 22:47 J -13877467.70 -13877467.55 -13877467.40 0.0078 0.0008

Venus -42708-10-14 12:42 J -13877387.17 -13877386.97 -13877386.77 0.0078 0.0035

Mercury -42708-10-21 23:59 J -13877379.64 -13877379.50 -13877379.35 0.0078 0.0016

Mercury -42707-01-18 01:26 J -13877291.58 -13877291.44 -13877291.29 0.0078 0.0023

Mercury -42707-04-16 02:38 J -13877203.51 -13877203.39 -13877203.24 0.0078 0.0031

Venus -42707-05-27 22:04 J -13877161.77 -13877161.58 -13877161.37 0.0078 0.0036

Mercury -42707-07-13 04:18 J -13877115.45 -13877115.32 -13877115.19 0.0078 0.0038

Mercury -42707-10-09 05:16 J -13877027.38 -13877027.28 -13877027.15 0.0077 0.0046

Mercury -42706-01-05 06:42 J -13876939.31 -13876939.22 -13876939.10 0.0077 0.0053

Mercury -42706-04-03 08:23 J -13876851.24 -13876851.15 -13876851.06 0.0077 0.0060

Mercury -42706-06-30 09:21 J -13876763.17 -13876763.11 -13876763.03 0.0077 0.0067

Mercury -42706-09-26 10:33 J -13876675.08 -13876675.06 -13876675.00 0.0077 0.0074

Mars -42554-01-04 05:30 J -13821422.55 -13821422.27 -13821421.97 0.0064 0.0006

Mercury -42552-09-21 06:14 J -13820431.24 -13820431.24 -13820431.22 0.0065 0.0065

Mercury -42552-12-18 07:11 J -13820343.24 -13820343.20 -13820343.12 0.0065 0.0061

Mercury -42551-03-16 08:23 J -13820255.22 -13820255.15 -13820255.04 0.0065 0.0056

Moon -42551-03-24 07:54 J -13820247.17 -13820247.17 -13820247.13 0.0065 0.0065

Earth -42551-03-24 11:30 J -13820247.02 -13820247.02 -13820246.98 0.0065 0.0065

Mercury -42551-06-12 09:35 J -13820167.19 -13820167.10 -13820166.98 0.0065 0.0051

Mercury -42551-09-08 10:47 J -13820079.15 -13820079.05 -13820078.91 0.0066 0.0046

Mercury -42551-12-05 11:59 J -13819991.11 -13819991.00 -13819990.85 0.0066 0.0041

Mercury -42550-03-03 13:11 J -13819903.07 -13819902.95 -13819902.79 0.0066 0.0036

Earth -42550-03-26 01:26 J -13819880.69 -13819880.44 -13819880.18 0.0066 0.0011

Moon -42550-03-26 03:50 J -13819880.60 -13819880.34 -13819880.07 0.0066 0.0010 \*  
 Mercury -42550-05-30 14:52 J -13819815.03 -13819814.88 -13819814.73 0.0066 0.0030  
 Mercury -42550-08-26 16:04 J -13819726.98 -13819726.83 -13819726.67 0.0066 0.0025  
 Mercury -42550-11-22 17:16 J -13819638.93 -13819638.78 -13819638.61 0.0066 0.0020  
 Mercury -42549-02-18 18:42 J -13819550.88 -13819550.72 -13819550.55 0.0066 0.0015  
 Mercury -42549-05-16 19:54 J -13819462.83 -13819462.67 -13819462.50 0.0066 0.0009  
 Mercury -42549-08-12 21:21 J -13819374.78 -13819374.61 -13819374.44 0.0066 0.0004  
 Venus -42549-10-19 21:35 J -13819306.67 -13819306.60 -13819306.49 0.0066 0.0061  
 Mercury -42549-11-08 22:33 J -13819286.73 -13819286.56 -13819286.39 0.0066 0.0002  
 Mercury -42548-02-04 23:59 J -13819198.67 -13819198.50 -13819198.33 0.0066 0.0007  
 Mercury -42548-05-04 01:11 J -13819110.62 -13819110.45 -13819110.28 0.0067 0.0012  
 Venus -42548-06-02 02:38 J -13819081.60 -13819081.39 -13819081.17 0.0067 0.0017  
 Mercury -42548-07-31 02:23 J -13819022.56 -13819022.40 -13819022.23 0.0067 0.0018  
 Mercury -42548-10-27 03:35 J -13818934.50 -13818934.35 -13818934.18 0.0067 0.0024  
 Venus -42547-01-13 07:26 J -13818856.38 -13818856.19 -13818855.98 0.0067 0.0027  
 Mercury -42547-01-23 05:02 J -13818846.43 -13818846.29 -13818846.13 0.0067 0.0029  
 Mercury -42547-04-21 06:14 J -13818758.37 -13818758.24 -13818758.08 0.0067 0.0035  
 Mercury -42547-07-18 07:54 J -13818670.30 -13818670.17 -13818670.03 0.0067 0.0040  
 Mercury -42547-10-14 09:06 J -13818582.23 -13818582.12 -13818581.99 0.0067 0.0046  
 Mercury -42546-01-10 10:18 J -13818494.16 -13818494.07 -13818493.94 0.0067 0.0052  
 Mercury -42546-04-08 11:59 J -13818406.08 -13818406.00 -13818405.91 0.0067 0.0058  
 Mercury -42546-07-05 13:11 J -13818317.99 -13818317.95 -13818317.88 0.0067 0.0064  
 Mercury -42464-04-19 23:02 J -13788443.59 -13788443.54 -13788443.47 0.0079 0.0073  
 Mercury -42464-07-17 00:42 J -13788355.55 -13788355.47 -13788355.38 0.0079 0.0064  
 Earth -42464-09-26 18:14 J -13788283.83 -13788283.74 -13788283.59 0.0079 0.0071  
 Moon -42464-09-26 20:52 J -13788283.72 -13788283.63 -13788283.50 0.0079 0.0072 \*  
 Mercury -42464-10-13 02:09 J -13788267.51 -13788267.41 -13788267.30 0.0079 0.0056  
 Mercury -42463-01-09 03:35 J -13788179.46 -13788179.35 -13788179.22 0.0079 0.0048  
 Mercury -42463-04-07 05:16 J -13788091.40 -13788091.28 -13788091.15 0.0079 0.0040  
 Mercury -42463-07-04 06:42 J -13788003.35 -13788003.22 -13788003.08 0.0079 0.0032

Moon -42463-09-28 21:50 J -13787916.70 -13787916.59 -13787916.43 0.0079 0.0066  
 Earth -42463-09-28 22:18 J -13787916.70 -13787916.57 -13787916.40 0.0079 0.0064 \*  
 Mercury -42463-09-30 08:23 J -13787915.29 -13787915.15 -13787915.01 0.0079 0.0024  
 Mercury -42463-12-27 09:35 J -13787827.24 -13787827.10 -13787826.95 0.0078 0.0017  
 Mercury -42462-03-25 11:16 J -13787739.18 -13787739.03 -13787738.88 0.0078 0.0008  
 Mercury -42462-06-21 12:42 J -13787651.12 -13787650.97 -13787650.82 0.0078 0.0001  
 Mercury -42462-09-17 14:09 J -13787563.06 -13787562.91 -13787562.76 0.0078 0.0007  
 Venus -42462-11-12 21:35 J -13787506.81 -13787506.60 -13787506.38 0.0078 0.0020  
 Mercury -42462-12-14 15:21 J -13787475.00 -13787474.86 -13787474.71 0.0078 0.0015  
 Mercury -42461-03-11 17:02 J -13787386.93 -13787386.79 -13787386.65 0.0078 0.0022  
 Mercury -42461-06-07 18:14 J -13787298.87 -13787298.74 -13787298.60 0.0078 0.0030  
 Venus -42461-06-25 06:57 J -13787281.35 -13787281.21 -13787281.02 0.0078 0.0052  
 Mercury -42461-09-03 19:40 J -13787210.81 -13787210.68 -13787210.55 0.0078 0.0037  
 Mercury -42461-11-30 20:52 J -13787122.74 -13787122.63 -13787122.50 0.0077 0.0044  
 Mercury -42460-02-26 22:18 J -13787034.67 -13787034.57 -13787034.46 0.0077 0.0051  
 Mercury -42460-05-25 23:45 J -13786946.60 -13786946.51 -13786946.42 0.0077 0.0059  
 Mercury -42460-08-22 00:42 J -13786858.53 -13786858.47 -13786858.38 0.0077 0.0066  
 Mercury -42460-11-18 01:54 J -13786770.45 -13786770.42 -13786770.36 0.0077 0.0073  
 Mars -42308-05-27 18:28 J -13731426.90 -13731426.73 -13731426.47 0.0064 0.0045  
 Mercury -42305-02-09 21:35 J -13730438.62 -13730438.60 -13730438.53 0.0065 0.0063  
 Mercury -42305-05-07 22:47 J -13730350.61 -13730350.55 -13730350.45 0.0065 0.0058  
 Mercury -42305-08-04 00:14 J -13730262.58 -13730262.49 -13730262.38 0.0066 0.0053  
 Mercury -42305-10-31 01:26 J -13730174.54 -13730174.44 -13730174.31 0.0066 0.0048  
 Mercury -42304-01-27 02:38 J -13730086.50 -13730086.39 -13730086.25 0.0066 0.0043  
 Moon -42304-03-26 22:33 J -13730027.82 -13730027.56 -13730027.29 0.0066 0.0003  
 Earth -42304-03-27 01:54 J -13730027.68 -13730027.42 -13730027.16 0.0066 0.0001 \*  
 Mercury -42304-04-25 04:18 J -13729998.46 -13729998.32 -13729998.18 0.0066 0.0037  
 Mercury -42304-07-22 05:16 J -13729910.42 -13729910.28 -13729910.12 0.0066 0.0032  
 Mercury -42304-10-18 06:28 J -13729822.37 -13729822.23 -13729822.07 0.0066 0.0027  
 Mercury -42303-01-14 07:40 J -13729734.33 -13729734.18 -13729734.01 0.0066 0.0022

Mercury -42303-04-12 09:21 J -13729646.28 -13729646.11 -13729645.95 0.0066 0.0017  
 Mercury -42303-07-09 10:33 J -13729558.23 -13729558.06 -13729557.89 0.0066 0.0011  
 Mercury -42303-10-05 11:45 J -13729470.17 -13729470.01 -13729469.84 0.0066 0.0006  
 Venus -42303-11-18 06:42 J -13729426.35 -13729426.22 -13729426.06 0.0066 0.0050  
 Mercury -42302-01-01 13:11 J -13729382.12 -13729381.95 -13729381.78 0.0066 0.0001  
 Mercury -42302-03-30 14:23 J -13729294.07 -13729293.90 -13729293.73 0.0067 0.0005  
 Mercury -42302-06-26 15:35 J -13729206.01 -13729205.85 -13729205.67 0.0067 0.0011  
 Venus -42302-07-01 11:45 J -13729201.23 -13729201.01 -13729200.79 0.0067 0.0006  
 Mercury -42302-09-22 17:02 J -13729117.95 -13729117.79 -13729117.62 0.0067 0.0016  
 Mercury -42302-12-19 18:28 J -13729029.89 -13729029.73 -13729029.57 0.0067 0.0021  
 Venus -42301-02-11 16:18 J -13728975.99 -13728975.82 -13728975.63 0.0067 0.0038  
 Mercury -42301-03-16 19:40 J -13728941.83 -13728941.68 -13728941.52 0.0067 0.0027  
 Mercury -42301-06-12 20:52 J -13728853.76 -13728853.63 -13728853.47 0.0067 0.0033  
 Mercury -42301-09-08 22:18 J -13728765.70 -13728765.57 -13728765.42 0.0067 0.0039  
 Mercury -42301-12-05 23:30 J -13728677.63 -13728677.52 -13728677.37 0.0067 0.0045  
 Mercury -42300-03-04 01:26 J -13728589.56 -13728589.44 -13728589.33 0.0067 0.0050  
 Mercury -42300-05-31 02:38 J -13728501.48 -13728501.39 -13728501.29 0.0067 0.0056  
 Mercury -42300-08-27 03:50 J -13728413.39 -13728413.34 -13728413.25 0.0068 0.0062  
 Mercury -42300-11-23 05:30 J -13728325.27 -13728325.27 -13728325.25 0.0068 0.0067  
 Mercury -42218-06-12 14:38 J -13698538.94 -13698538.89 -13698538.83 0.0079 0.0073  
 Mercury -42218-09-08 16:04 J -13698450.90 -13698450.83 -13698450.73 0.0079 0.0065  
 Mercury -42218-12-05 17:45 J -13698362.86 -13698362.76 -13698362.65 0.0079 0.0056  
 Mercury -42217-03-02 19:11 J -13698274.81 -13698274.70 -13698274.57 0.0079 0.0048  
 Mercury -42217-05-29 20:38 J -13698186.76 -13698186.64 -13698186.50 0.0079 0.0040  
 Mercury -42217-08-25 22:18 J -13698098.70 -13698098.57 -13698098.43 0.0079 0.0032  
 Earth -42217-09-29 23:45 J -13698063.68 -13698063.51 -13698063.30 0.0079 0.0053  
 Moon -42217-09-30 03:50 J -13698063.52 -13698063.34 -13698063.14 0.0079 0.0053 \*  
 Mercury -42217-11-21 23:30 J -13698010.65 -13698010.52 -13698010.37 0.0079 0.0025  
 Mercury -42216-02-18 01:11 J -13697922.59 -13697922.45 -13697922.30 0.0078 0.0016  
 Venus -42216-04-29 20:52 J -13697851.68 -13697851.63 -13697851.54 0.0078 0.0075

Mercury -42216-05-17 02:38 J -13697834.53 -13697834.39 -13697834.24 0.0078 0.0009  
 Mercury -42216-08-13 04:04 J -13697746.47 -13697746.33 -13697746.18 0.0078 0.0002  
 Mercury -42216-11-09 05:30 J -13697658.41 -13697658.27 -13697658.12 0.0078 0.0007  
 Venus -42216-12-11 06:57 J -13697626.43 -13697626.21 -13697625.98 0.0078 0.0003  
 Mercury -42215-02-05 06:57 J -13697570.35 -13697570.21 -13697570.06 0.0078 0.0015  
 Mercury -42215-05-04 08:23 J -13697482.29 -13697482.15 -13697482.01 0.0078 0.0022  
 Venus -42215-07-24 16:33 J -13697400.90 -13697400.81 -13697400.70 0.0078 0.0069  
 Mercury -42215-07-31 09:35 J -13697394.23 -13697394.10 -13697393.96 0.0078 0.0030  
 Mercury -42215-10-27 11:02 J -13697306.17 -13697306.04 -13697305.91 0.0077 0.0037  
 Mercury -42214-01-23 12:14 J -13697218.10 -13697217.99 -13697217.86 0.0077 0.0044  
 Mercury -42214-04-21 13:40 J -13697130.03 -13697129.93 -13697129.81 0.0077 0.0051  
 Mercury -42214-07-18 15:06 J -13697041.96 -13697041.87 -13697041.77 0.0077 0.0058  
 Mercury -42214-10-14 16:33 J -13696953.89 -13696953.81 -13696953.74 0.0077 0.0065  
 Mercury -42213-01-10 17:16 J -13696865.80 -13696865.78 -13696865.71 0.0077 0.0073  
 Mercury -42059-06-30 13:26 J -13640446.00 -13640445.94 -13640445.88 0.0065 0.0061  
 Mercury -42059-09-26 14:23 J -13640357.98 -13640357.90 -13640357.81 0.0066 0.0056  
 Mercury -42059-12-23 15:35 J -13640269.95 -13640269.85 -13640269.74 0.0066 0.0051  
 Mercury -42058-03-21 16:47 J -13640181.91 -13640181.80 -13640181.67 0.0066 0.0046  
 Moon -42058-03-28 22:47 J -13640174.78 -13640174.55 -13640174.30 0.0066 0.0021  
 Earth -42058-03-29 00:14 J -13640174.73 -13640174.49 -13640174.23 0.0066 0.0018 \*  
 Mercury -42058-06-17 17:59 J -13640093.87 -13640093.75 -13640093.61 0.0066 0.0041  
 Mercury -42058-09-13 19:11 J -13640005.83 -13640005.70 -13640005.55 0.0066 0.0036  
 Mercury -42058-12-10 20:23 J -13639917.79 -13639917.65 -13639917.49 0.0066 0.0031  
 Mercury -42057-03-07 21:50 J -13639829.74 -13639829.59 -13639829.43 0.0066 0.0025  
 Moon -42057-03-29 12:14 J -13639808.03 -13639807.99 -13639807.86 0.0066 0.0064  
 Earth -42057-03-29 13:26 J -13639808.01 -13639807.94 -13639807.79 0.0066 0.0060 \*  
 Mercury -42057-06-03 23:02 J -13639741.69 -13639741.54 -13639741.37 0.0066 0.0020  
 Mercury -42057-08-31 00:14 J -13639653.64 -13639653.49 -13639653.31 0.0066 0.0015  
 Mercury -42057-11-27 01:40 J -13639565.59 -13639565.43 -13639565.26 0.0066 0.0010  
 Venus -42057-12-16 13:54 J -13639546.06 -13639545.92 -13639545.73 0.0066 0.0045

Mercury -42056-02-23 03:06 J -13639477.54 -13639477.37 -13639477.20 0.0066 0.0004

Mercury -42056-05-22 04:18 J -13639389.49 -13639389.32 -13639389.15 0.0067 0.0002

Venus -42056-07-29 19:11 J -13639320.92 -13639320.70 -13639320.48 0.0067 0.0001

Mercury -42056-08-18 05:45 J -13639301.43 -13639301.26 -13639301.09 0.0067 0.0007

Mercury -42056-11-14 06:57 J -13639213.37 -13639213.21 -13639213.04 0.0067 0.0012

Mercury -42055-02-10 08:09 J -13639125.31 -13639125.16 -13639124.99 0.0067 0.0018

Venus -42055-03-11 23:16 J -13639095.67 -13639095.53 -13639095.34 0.0067 0.0044

Mercury -42055-05-09 09:35 J -13639037.25 -13639037.10 -13639036.93 0.0067 0.0023

Mercury -42055-08-05 10:47 J -13638949.19 -13638949.05 -13638948.88 0.0067 0.0029

Mercury -42055-11-01 12:28 J -13638861.13 -13638860.98 -13638860.83 0.0067 0.0034

Mercury -42054-01-28 13:40 J -13638773.06 -13638772.93 -13638772.78 0.0067 0.0040

Mercury -42054-04-26 14:52 J -13638684.99 -13638684.88 -13638684.74 0.0067 0.0046

Mercury -42054-07-23 16:33 J -13638596.91 -13638596.81 -13638596.70 0.0067 0.0052

Mercury -42054-10-19 17:45 J -13638508.83 -13638508.76 -13638508.66 0.0068 0.0058

Mercury -42053-01-15 19:11 J -13638420.74 -13638420.70 -13638420.63 0.0068 0.0064

# 42ND MILLENNIUM BCE

This is a list of transits visible from Pluto in the 42nd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-41972-08-04 04:47 J	-13608634.32	-13608634.30	-13608634.26	0.0079	0.0078		
Mercury	-41972-10-31 06:14 J	-13608546.29	-13608546.24	-13608546.15	0.0079	0.0069		
Mercury	-41971-01-27 07:54 J	-13608458.25	-13608458.17	-13608458.06	0.0079	0.0061		

Mercury -41971-04-25 09:21 J -13608370.21 -13608370.11 -13608369.99 0.0079 0.0053

Mercury -41971-07-22 10:47 J -13608282.16 -13608282.05 -13608281.91 0.0079 0.0045

Moon -41971-10-01 18:42 J -13608210.96 -13608210.72 -13608210.45 0.0079 0.0023

Earth -41971-10-01 19:54 J -13608210.92 -13608210.67 -13608210.43 0.0079 0.0024 \*

Mercury -41971-10-18 12:28 J -13608194.10 -13608193.98 -13608193.84 0.0079 0.0037

Mercury -41970-01-14 13:54 J -13608106.05 -13608105.92 -13608105.77 0.0078 0.0029

Mercury -41970-04-12 15:35 J -13608017.99 -13608017.85 -13608017.71 0.0078 0.0020

Venus -41970-05-29 02:23 J -13607971.45 -13607971.40 -13607971.29 0.0078 0.0073

Mercury -41970-07-09 17:02 J -13607929.94 -13607929.79 -13607929.64 0.0078 0.0013

Mercury -41970-10-05 18:28 J -13607841.88 -13607841.73 -13607841.58 0.0078 0.0005

Mercury -41969-01-01 19:54 J -13607753.82 -13607753.67 -13607753.52 0.0078 0.0003

Venus -41969-01-09 12:57 J -13607746.19 -13607745.96 -13607745.74 0.0078 0.0001

Mercury -41969-03-29 21:06 J -13607665.76 -13607665.62 -13607665.47 0.0078 0.0011

Mercury -41969-06-25 22:33 J -13607577.70 -13607577.56 -13607577.41 0.0078 0.0018

Venus -41969-08-21 21:50 J -13607520.65 -13607520.59 -13607520.48 0.0078 0.0072

Mercury -41969-09-21 23:59 J -13607489.64 -13607489.50 -13607489.36 0.0078 0.0025

Mercury -41969-12-19 01:26 J -13607401.57 -13607401.44 -13607401.31 0.0077 0.0033

Mercury -41968-03-17 02:38 J -13607313.51 -13607313.39 -13607313.26 0.0077 0.0040

Mercury -41968-06-13 03:50 J -13607225.44 -13607225.34 -13607225.21 0.0077 0.0048

Mercury -41968-09-09 05:16 J -13607137.37 -13607137.28 -13607137.17 0.0077 0.0054

Mercury -41968-12-06 06:42 J -13607049.30 -13607049.22 -13607049.13 0.0077 0.0061

Mercury -41967-03-04 07:40 J -13606961.23 -13606961.18 -13606961.10 0.0077 0.0069

Mercury -41967-05-31 08:52 J -13606873.13 -13606873.13 -13606873.09 0.0077 0.0076

Mercury -41813-11-18 04:04 J -13550453.39 -13550453.33 -13550453.27 0.0066 0.0061

Mercury -41812-02-14 05:16 J -13550365.37 -13550365.28 -13550365.20 0.0066 0.0056

Earth -41812-03-29 19:54 J -13550321.84 -13550321.67 -13550321.43 0.0066 0.0041

Moon -41812-03-29 23:45 J -13550321.68 -13550321.51 -13550321.30 0.0066 0.0044 \*

Mercury -41812-05-13 06:14 J -13550277.33 -13550277.24 -13550277.13 0.0066 0.0051

Mercury -41812-08-09 07:26 J -13550189.30 -13550189.19 -13550189.06 0.0066 0.0046

Mercury -41812-11-05 08:38 J -13550101.26 -13550101.14 -13550101.00 0.0066 0.0041

Mercury -41811-02-01 09:50 J -13550013.22 -13550013.09 -13550012.94 0.0066 0.0036

Moon -41811-03-31 06:42 J -13549955.39 -13549955.22 -13549954.98 0.0066 0.0042

Earth -41811-03-31 10:18 J -13549955.27 -13549955.07 -13549954.84 0.0066 0.0037 \*

Mercury -41811-04-30 11:16 J -13549925.17 -13549925.03 -13549924.88 0.0066 0.0031

Mercury -41811-07-27 12:28 J -13549837.13 -13549836.98 -13549836.82 0.0066 0.0025

Mercury -41811-10-23 13:40 J -13549749.08 -13549748.93 -13549748.76 0.0066 0.0020

Venus -41810-01-14 20:52 J -13549665.80 -13549665.63 -13549665.46 0.0066 0.0043

Mercury -41810-01-19 15:06 J -13549661.03 -13549660.87 -13549660.70 0.0066 0.0015

Mercury -41810-04-17 16:18 J -13549572.98 -13549572.82 -13549572.64 0.0066 0.0010

Mercury -41810-07-14 17:45 J -13549484.93 -13549484.76 -13549484.59 0.0067 0.0004

Venus -41810-08-28 01:26 J -13549440.66 -13549440.44 -13549440.22 0.0067 0.0001

Mercury -41810-10-10 18:57 J -13549396.87 -13549396.71 -13549396.53 0.0067 0.0003

Mercury -41809-01-06 20:23 J -13549308.82 -13549308.65 -13549308.48 0.0067 0.0007

Mercury -41809-04-03 21:35 J -13549220.76 -13549220.60 -13549220.43 0.0067 0.0013

Venus -41809-04-09 05:30 J -13549215.41 -13549215.27 -13549215.08 0.0067 0.0045

Mercury -41809-06-30 23:02 J -13549132.70 -13549132.54 -13549132.37 0.0067 0.0018

Mercury -41809-09-27 00:14 J -13549044.64 -13549044.49 -13549044.32 0.0067 0.0024

Mercury -41809-12-24 01:40 J -13548956.58 -13548956.43 -13548956.27 0.0067 0.0029

Mercury -41808-03-22 02:52 J -13548868.51 -13548868.38 -13548868.22 0.0067 0.0035

Mercury -41808-06-18 04:04 J -13548780.45 -13548780.33 -13548780.17 0.0067 0.0042

Mercury -41808-09-14 05:45 J -13548692.37 -13548692.26 -13548692.13 0.0067 0.0047

Mercury -41808-12-11 06:57 J -13548604.30 -13548604.21 -13548604.09 0.0068 0.0053

Mercury -41807-03-09 08:23 J -13548516.22 -13548516.15 -13548516.05 0.0068 0.0059

Mercury -41807-06-05 09:35 J -13548428.12 -13548428.10 -13548428.02 0.0068 0.0065

Mars -41728-09-02 12:28 J -13519484.28 -13519483.98 -13519483.68 0.0080 0.0040

Mercury -41726-12-23 20:38 J -13518641.68 -13518641.64 -13518641.58 0.0079 0.0074

Mercury -41725-03-20 22:04 J -13518553.65 -13518553.58 -13518553.48 0.0079 0.0066

Mercury -41725-06-16 23:30 J -13518465.60 -13518465.52 -13518465.40 0.0079 0.0058

Mercury -41725-09-13 01:11 J -13518377.55 -13518377.45 -13518377.32 0.0079 0.0050

Moon -41725-10-02 11:45 J -13518358.26 -13518358.01 -13518357.75 0.0079 0.0009



Earth -41725-10-02 15:06 J -13518358.12 -13518357.87 -13518357.61 0.0079 0.0007 \*  
 Mercury -41725-12-10 02:38 J -13518289.50 -13518289.39 -13518289.25 0.0079 0.0042  
 Mercury -41724-03-08 04:18 J -13518201.45 -13518201.32 -13518201.18 0.0078 0.0033  
 Mercury -41724-06-04 05:45 J -13518113.40 -13518113.26 -13518113.11 0.0078 0.0026  
 Venus -41724-06-26 08:09 J -13518091.22 -13518091.16 -13518091.03 0.0078 0.0072  
 Mercury -41724-08-31 07:26 J -13518025.34 -13518025.19 -13518025.05 0.0078 0.0018  
 Mercury -41724-11-27 08:38 J -13517937.28 -13517937.14 -13517936.99 0.0078 0.0010  
 Venus -41723-02-06 18:42 J -13517865.94 -13517865.72 -13517865.50 0.0078 0.0002  
 Mercury -41723-02-23 10:04 J -13517849.22 -13517849.08 -13517848.93 0.0078 0.0003  
 Mercury -41723-05-22 11:30 J -13517761.16 -13517761.02 -13517760.87 0.0078 0.0006  
 Mercury -41723-08-18 12:57 J -13517673.10 -13517672.96 -13517672.81 0.0078 0.0013  
 Venus -41723-09-20 04:04 J -13517640.39 -13517640.33 -13517640.25 0.0078 0.0073  
 Mercury -41723-11-14 14:09 J -13517585.04 -13517584.91 -13517584.76 0.0078 0.0021  
 Mercury -41722-02-10 15:35 J -13517496.98 -13517496.85 -13517496.71 0.0077 0.0028  
 Mercury -41722-05-09 16:47 J -13517408.92 -13517408.80 -13517408.66 0.0077 0.0036  
 Mercury -41722-08-05 18:28 J -13517320.85 -13517320.73 -13517320.61 0.0077 0.0043  
 Mercury -41722-11-01 19:26 J -13517232.79 -13517232.69 -13517232.57 0.0077 0.0050  
 Mercury -41721-01-28 20:52 J -13517144.72 -13517144.63 -13517144.52 0.0077 0.0057  
 Mercury -41721-04-25 22:04 J -13517056.65 -13517056.58 -13517056.49 0.0077 0.0064  
 Mercury -41721-07-22 23:30 J -13516968.57 -13516968.52 -13516968.46 0.0077 0.0071  
 Mercury -41566-04-08 17:45 J -13460460.79 -13460460.76 -13460460.69 0.0066 0.0063  
 Mercury -41566-07-05 18:57 J -13460372.77 -13460372.71 -13460372.61 0.0066 0.0058  
 Mercury -41566-10-01 20:38 J -13460284.74 -13460284.64 -13460284.54 0.0066 0.0052  
 Mercury -41566-12-28 21:35 J -13460196.70 -13460196.60 -13460196.47 0.0066 0.0047  
 Mercury -41565-03-25 22:47 J -13460108.67 -13460108.55 -13460108.41 0.0066 0.0042  
 Earth -41565-04-01 04:47 J -13460102.55 -13460102.30 -13460102.03 0.0066 0.0010  
 Moon -41565-04-01 07:11 J -13460102.44 -13460102.20 -13460101.94 0.0066 0.0013 \*  
 Mercury -41565-06-21 23:59 J -13460020.62 -13460020.50 -13460020.35 0.0066 0.0037  
 Mercury -41565-09-18 01:11 J -13459932.58 -13459932.45 -13459932.29 0.0066 0.0032  
 Mercury -41565-12-15 02:52 J -13459844.54 -13459844.38 -13459844.23 0.0066 0.0027

Venus -41564-02-12 01:26 J -13459785.57 -13459785.44 -13459785.26 0.0066 0.0047

Mercury -41564-03-13 03:50 J -13459756.49 -13459756.34 -13459756.17 0.0066 0.0022

Mercury -41564-06-09 05:16 J -13459668.44 -13459668.28 -13459668.11 0.0066 0.0016

Mercury -41564-09-05 06:42 J -13459580.39 -13459580.22 -13459580.05 0.0066 0.0011

Venus -41564-09-25 06:28 J -13459560.44 -13459560.23 -13459560.01 0.0067 0.0003

Mercury -41564-12-02 07:54 J -13459492.34 -13459492.17 -13459492.00 0.0067 0.0005

Mercury -41563-02-28 09:21 J -13459404.28 -13459404.11 -13459403.94 0.0067 0.0000

Venus -41563-05-08 11:02 J -13459335.20 -13459335.04 -13459334.86 0.0067 0.0041

Mercury -41563-05-27 10:33 J -13459316.23 -13459316.06 -13459315.89 0.0067 0.0006

Mercury -41563-08-23 11:59 J -13459228.17 -13459228.00 -13459227.83 0.0067 0.0011

Mercury -41563-11-19 13:11 J -13459140.11 -13459139.95 -13459139.78 0.0067 0.0017

Mercury -41562-02-15 14:38 J -13459052.05 -13459051.89 -13459051.73 0.0067 0.0023

Mercury -41562-05-14 15:50 J -13458963.99 -13458963.84 -13458963.68 0.0067 0.0028

Mercury -41562-08-10 17:02 J -13458875.92 -13458875.79 -13458875.63 0.0067 0.0035

Mercury -41562-11-06 18:42 J -13458787.85 -13458787.72 -13458787.58 0.0067 0.0040

Mercury -41561-02-02 19:54 J -13458699.78 -13458699.67 -13458699.53 0.0067 0.0046

Mercury -41561-04-30 21:06 J -13458611.71 -13458611.62 -13458611.49 0.0068 0.0052

Mercury -41561-07-27 22:33 J -13458523.63 -13458523.56 -13458523.45 0.0068 0.0058

Mercury -41561-10-23 23:59 J -13458435.54 -13458435.50 -13458435.42 0.0068 0.0064

Mars -41481-01-23 22:33 J -13429489.88 -13429489.56 -13429489.20 0.0080 0.0012

Mercury -41479-05-13 11:02 J -13428649.07 -13428649.04 -13428648.98 0.0079 0.0075

Mercury -41479-08-09 12:28 J -13428561.04 -13428560.98 -13428560.88 0.0079 0.0067

Earth -41479-10-04 04:18 J -13428505.49 -13428505.32 -13428505.11 0.0079 0.0053

Moon -41479-10-04 06:14 J -13428505.38 -13428505.24 -13428505.04 0.0079 0.0057 \*

Mercury -41479-11-05 14:09 J -13428473.00 -13428472.91 -13428472.80 0.0079 0.0059

Mercury -41478-02-01 15:35 J -13428384.95 -13428384.85 -13428384.72 0.0079 0.0051

Mercury -41478-04-30 17:16 J -13428296.90 -13428296.78 -13428296.65 0.0079 0.0042

Mercury -41478-07-27 18:42 J -13428208.84 -13428208.72 -13428208.58 0.0078 0.0035

Mercury -41478-10-23 20:23 J -13428120.79 -13428120.65 -13428120.51 0.0078 0.0026

Mercury -41477-01-19 21:50 J -13428032.73 -13428032.59 -13428032.44 0.0078 0.0019

Venus -41477-03-06 20:52 J -13427985.85 -13427985.63 -13427985.41 0.0078 0.0011

Mercury -41477-04-16 23:16 J -13427944.67 -13427944.53 -13427944.38 0.0078 0.0011

Mercury -41477-07-14 00:42 J -13427856.62 -13427856.47 -13427856.32 0.0078 0.0003

Mercury -41477-10-10 02:09 J -13427768.56 -13427768.41 -13427768.26 0.0078 0.0004

Venus -41477-10-18 06:28 J -13427760.37 -13427760.23 -13427760.09 0.0078 0.0060

Mercury -41476-01-06 03:35 J -13427680.50 -13427680.35 -13427680.21 0.0078 0.0012

Mercury -41476-04-04 04:47 J -13427592.44 -13427592.30 -13427592.15 0.0077 0.0020

Mercury -41476-07-01 05:59 J -13427504.37 -13427504.25 -13427504.10 0.0077 0.0028

Mercury -41476-09-27 07:26 J -13427416.31 -13427416.19 -13427416.05 0.0077 0.0034

Mercury -41476-12-24 08:52 J -13427328.25 -13427328.13 -13427328.00 0.0077 0.0041

Mercury -41475-03-22 10:04 J -13427240.18 -13427240.08 -13427239.96 0.0077 0.0049

Mercury -41475-06-18 11:16 J -13427152.11 -13427152.03 -13427151.91 0.0077 0.0056

Mercury -41475-09-14 12:42 J -13427064.04 -13427063.97 -13427063.88 0.0077 0.0063

Mercury -41475-12-11 13:54 J -13426975.96 -13426975.92 -13426975.85 0.0077 0.0070

Mercury -41320-08-27 07:40 J -13370468.19 -13370468.18 -13370468.15 0.0066 0.0065

Mercury -41320-11-23 08:52 J -13370380.19 -13370380.13 -13370380.06 0.0066 0.0060

Mercury -41319-02-19 10:04 J -13370292.16 -13370292.08 -13370291.98 0.0066 0.0055

Earth -41319-04-02 20:52 J -13370249.87 -13370249.63 -13370249.39 0.0066 0.0023

Moon -41319-04-02 22:47 J -13370249.79 -13370249.55 -13370249.28 0.0066 0.0021 \*

Mercury -41319-05-18 11:02 J -13370204.13 -13370204.04 -13370203.91 0.0066 0.0050

Mercury -41319-08-14 12:14 J -13370116.09 -13370115.99 -13370115.85 0.0066 0.0045

Mercury -41319-11-10 13:26 J -13370028.05 -13370027.94 -13370027.79 0.0066 0.0040

Mercury -41318-02-06 15:06 J -13369940.01 -13369939.87 -13369939.72 0.0066 0.0035

Venus -41318-03-13 05:16 J -13369905.38 -13369905.28 -13369905.14 0.0066 0.0055

Earth -41318-04-04 10:18 J -13369883.18 -13369883.07 -13369882.89 0.0066 0.0056

Moon -41318-04-04 11:02 J -13369883.18 -13369883.04 -13369882.89 0.0066 0.0054 \*

Mercury -41318-05-05 16:18 J -13369851.97 -13369851.82 -13369851.66 0.0066 0.0029

Mercury -41318-08-01 17:30 J -13369763.92 -13369763.77 -13369763.60 0.0066 0.0024

Venus -41318-10-24 10:04 J -13369680.29 -13369680.08 -13369679.86 0.0066 0.0012

Mercury -41318-10-28 18:57 J -13369675.87 -13369675.71 -13369675.54 0.0066 0.0019

Mercury -41317-01-24 20:09 J -13369587.82 -13369587.66 -13369587.49 0.0067 0.0014

Mercury -41317-04-21 21:35 J -13369499.77 -13369499.60 -13369499.43 0.0067 0.0008

Venus -41317-06-05 14:23 J -13369455.07 -13369454.90 -13369454.69 0.0067 0.0033

Mercury -41317-07-18 23:02 J -13369411.71 -13369411.54 -13369411.37 0.0067 0.0003

Mercury -41317-10-15 00:14 J -13369323.66 -13369323.49 -13369323.32 0.0067 0.0003

Mercury -41316-01-11 01:26 J -13369235.60 -13369235.44 -13369235.26 0.0067 0.0009

Mercury -41316-04-09 02:52 J -13369147.54 -13369147.38 -13369147.21 0.0067 0.0014

Mercury -41316-07-06 04:04 J -13369059.48 -13369059.33 -13369059.16 0.0067 0.0020

Mercury -41316-10-02 05:30 J -13368971.42 -13368971.27 -13368971.11 0.0067 0.0026

Mercury -41316-12-29 06:42 J -13368883.36 -13368883.22 -13368883.06 0.0067 0.0032

Mercury -41315-03-27 08:23 J -13368795.29 -13368795.15 -13368795.01 0.0067 0.0037

Mercury -41315-06-23 09:35 J -13368707.22 -13368707.10 -13368706.96 0.0068 0.0043

Mercury -41315-09-19 10:47 J -13368619.15 -13368619.05 -13368618.91 0.0068 0.0049

Mercury -41315-12-16 12:14 J -13368531.07 -13368530.99 -13368530.87 0.0068 0.0055

Mercury -41314-03-14 13:40 J -13368442.99 -13368442.93 -13368442.84 0.0068 0.0061

Mercury -41314-06-10 14:52 J -13368354.88 -13368354.88 -13368354.82 0.0068 0.0067

Mars -41235-06-15 05:59 J -13339495.57 -13339495.25 -13339494.89 0.0080 0.0013

Mercury -41233-10-01 01:26 J -13338656.46 -13338656.44 -13338656.39 0.0079 0.0076

Mercury -41233-12-28 03:06 J -13338568.44 -13338568.37 -13338568.29 0.0079 0.0068

Mercury -41232-03-26 04:33 J -13338480.40 -13338480.31 -13338480.20 0.0079 0.0060

Mercury -41232-06-22 05:59 J -13338392.35 -13338392.25 -13338392.12 0.0079 0.0052

Mercury -41232-09-18 07:40 J -13338304.30 -13338304.18 -13338304.05 0.0078 0.0044

Moon -41232-10-06 19:54 J -13338285.88 -13338285.67 -13338285.43 0.0078 0.0036

Earth -41232-10-06 20:09 J -13338285.88 -13338285.66 -13338285.40 0.0078 0.0032 \*

Mercury -41232-12-15 09:06 J -13338216.25 -13338216.12 -13338215.98 0.0078 0.0036

Mercury -41231-03-13 10:33 J -13338128.19 -13338128.06 -13338127.91 0.0078 0.0028

Venus -41231-04-04 21:50 J -13338105.78 -13338105.59 -13338105.36 0.0078 0.0028

Mercury -41231-06-09 11:59 J -13338040.14 -13338040.00 -13338039.85 0.0078 0.0020

Mercury -41231-09-05 13:40 J -13337952.08 -13337951.93 -13337951.79 0.0078 0.0012

Venus -41231-11-16 07:54 J -13337880.35 -13337880.17 -13337879.99 0.0078 0.0045

Mercury -41231-12-02 15:06 J -13337864.02 -13337863.87 -13337863.73 0.0078 0.0005

Mercury -41230-02-28 16:18 J -13337775.96 -13337775.82 -13337775.67 0.0078 0.0004

Mercury -41230-05-27 17:45 J -13337687.90 -13337687.76 -13337687.61 0.0078 0.0011

Mercury -41230-08-23 19:11 J -13337599.84 -13337599.70 -13337599.56 0.0077 0.0018

Mercury -41230-11-19 20:23 J -13337511.78 -13337511.65 -13337511.50 0.0077 0.0026

Mercury -41229-02-15 21:35 J -13337423.72 -13337423.60 -13337423.45 0.0077 0.0034

Mercury -41229-05-13 23:02 J -13337335.65 -13337335.54 -13337335.40 0.0077 0.0040

Mercury -41229-08-10 00:28 J -13337247.59 -13337247.48 -13337247.36 0.0077 0.0047

Mercury -41229-11-06 01:54 J -13337159.52 -13337159.42 -13337159.32 0.0077 0.0054

Mercury -41228-02-02 02:52 J -13337071.45 -13337071.38 -13337071.28 0.0077 0.0062

Mercury -41228-05-01 04:04 J -13336983.37 -13336983.33 -13336983.25 0.0076 0.0069

Mercury -41228-07-28 05:30 J -13336895.28 -13336895.27 -13336895.23 0.0076 0.0075

Moon -41073-04-03 06:57 J -13280397.30 -13280397.21 -13280397.08 0.0066 0.0059

Earth -41073-04-03 10:18 J -13280397.15 -13280397.07 -13280396.94 0.0066 0.0060 \*

Mercury -41073-04-12 21:35 J -13280387.62 -13280387.60 -13280387.54 0.0066 0.0064

Mercury -41073-07-09 22:47 J -13280299.60 -13280299.55 -13280299.46 0.0066 0.0059

Mercury -41073-10-05 23:59 J -13280211.57 -13280211.50 -13280211.38 0.0066 0.0054

Mercury -41072-01-02 01:11 J -13280123.54 -13280123.45 -13280123.32 0.0066 0.0049

Mercury -41072-03-31 02:52 J -13280035.50 -13280035.38 -13280035.25 0.0066 0.0043

Earth -41072-04-05 00:28 J -13280030.72 -13280030.48 -13280030.22 0.0066 0.0018

Moon -41072-04-05 03:50 J -13280030.57 -13280030.34 -13280030.07 0.0066 0.0018 \*

Mercury -41072-06-27 04:04 J -13279947.46 -13279947.33 -13279947.19 0.0066 0.0038

Mercury -41072-09-23 05:16 J -13279859.42 -13279859.28 -13279859.13 0.0066 0.0033

Venus -41072-11-21 12:28 J -13279800.17 -13279799.98 -13279799.76 0.0066 0.0024

Mercury -41072-12-20 06:42 J -13279771.37 -13279771.22 -13279771.07 0.0066 0.0028

Mercury -41071-03-18 07:54 J -13279683.32 -13279683.17 -13279683.01 0.0066 0.0023

Mercury -41071-06-14 09:06 J -13279595.27 -13279595.12 -13279594.95 0.0067 0.0017

Venus -41071-07-04 17:16 J -13279574.99 -13279574.78 -13279574.57 0.0067 0.0020

Mercury -41071-09-10 10:33 J -13279507.22 -13279507.06 -13279506.89 0.0067 0.0012

Mercury -41071-12-07 11:45 J -13279419.17 -13279419.01 -13279418.83 0.0067 0.0007

Venus -41070-02-14 21:50 J -13279349.64 -13279349.59 -13279349.52 0.0067 0.0064

Mercury -41070-03-05 13:11 J -13279331.12 -13279330.95 -13279330.78 0.0067 0.0001

Mercury -41070-06-01 14:38 J -13279243.06 -13279242.89 -13279242.72 0.0067 0.0005

Mercury -41070-08-28 15:50 J -13279155.00 -13279154.84 -13279154.67 0.0067 0.0010

Mercury -41070-11-24 17:02 J -13279066.94 -13279066.79 -13279066.61 0.0067 0.0016

Mercury -41069-02-20 18:28 J -13278978.88 -13278978.73 -13278978.56 0.0067 0.0022

Mercury -41069-05-18 19:54 J -13278890.82 -13278890.67 -13278890.51 0.0067 0.0027

Mercury -41069-08-14 21:06 J -13278802.75 -13278802.62 -13278802.46 0.0067 0.0033

Mercury -41069-11-10 22:33 J -13278714.69 -13278714.56 -13278714.41 0.0068 0.0039

Mercury -41068-02-06 23:59 J -13278626.62 -13278626.50 -13278626.36 0.0068 0.0045

Mercury -41068-05-06 01:11 J -13278538.54 -13278538.45 -13278538.32 0.0068 0.0051

Mercury -41068-08-02 02:38 J -13278450.46 -13278450.39 -13278450.28 0.0068 0.0057

Mercury -41068-10-29 04:33 J -13278362.37 -13278362.31 -13278362.24 0.0068 0.0062

# 41ST MILLENNIUM BCE

This is a list of transits visible from Pluto in the 41st millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	-40989-11-04 04:33 J	-13249501.65	-13249501.31	-13249500.96	0.0080	0.0006		
Mercury	-40986-05-18 16:33 J	-13248575.86	-13248575.81	-13248575.75	0.0079	0.0073		
Mercury	-40986-08-14 17:59 J	-13248487.82	-13248487.75	-13248487.66	0.0079	0.0065		
Earth	-40986-10-08 04:33 J	-13248433.53	-13248433.31	-13248433.06	0.0079	0.0032		
Moon	-40986-10-08 08:09 J	-13248433.39	-13248433.16	-13248432.90	0.0079	0.0029	*	

Mercury -40986-11-10 19:40 J -13248399.78 -13248399.68 -13248399.58 0.0079 0.0057

Mercury -40985-02-06 21:06 J -13248311.73 -13248311.62 -13248311.50 0.0078 0.0049

Venus -40985-05-02 20:23 J -13248225.78 -13248225.65 -13248225.47 0.0078 0.0056

Mercury -40985-05-04 22:47 J -13248223.68 -13248223.55 -13248223.43 0.0078 0.0041

Mercury -40985-07-31 23:59 J -13248135.63 -13248135.50 -13248135.36 0.0078 0.0033

Mercury -40985-10-28 01:26 J -13248047.57 -13248047.44 -13248047.29 0.0078 0.0025

Venus -40985-12-14 06:28 J -13248000.44 -13248000.23 -13248000.00 0.0078 0.0018

Mercury -40984-01-24 03:06 J -13247959.52 -13247959.37 -13247959.23 0.0078 0.0017

Mercury -40984-04-22 04:18 J -13247871.46 -13247871.32 -13247871.17 0.0078 0.0010

Mercury -40984-07-19 05:59 J -13247783.40 -13247783.25 -13247783.11 0.0078 0.0003

Mercury -40984-10-15 07:11 J -13247695.34 -13247695.20 -13247695.05 0.0077 0.0006

Mercury -40983-01-11 08:38 J -13247607.28 -13247607.14 -13247606.99 0.0077 0.0013

Mercury -40983-04-09 10:04 J -13247519.22 -13247519.08 -13247518.94 0.0077 0.0021

Mercury -40983-07-06 11:16 J -13247431.16 -13247431.03 -13247430.89 0.0077 0.0028

Mercury -40983-10-02 12:42 J -13247343.10 -13247342.97 -13247342.84 0.0077 0.0035

Mercury -40983-12-29 14:09 J -13247255.04 -13247254.91 -13247254.79 0.0077 0.0042

Mercury -40982-03-27 15:06 J -13247166.97 -13247166.87 -13247166.75 0.0077 0.0050

Mercury -40982-06-23 16:18 J -13247078.90 -13247078.82 -13247078.71 0.0077 0.0057

Mercury -40982-09-19 17:45 J -13246990.83 -13246990.76 -13246990.67 0.0076 0.0063

Mercury -40982-12-16 18:57 J -13246902.75 -13246902.71 -13246902.64 0.0076 0.0070

Mercury -40827-11-28 11:16 J -13190307.04 -13190307.03 -13190306.99 0.0066 0.0065

Mercury -40826-02-24 12:28 J -13190219.03 -13190218.98 -13190218.90 0.0066 0.0060

Moon -40826-04-06 09:50 J -13190178.33 -13190178.09 -13190177.84 0.0066 0.0026

Earth -40826-04-06 11:30 J -13190178.24 -13190178.02 -13190177.77 0.0066 0.0028 \*

Mercury -40826-05-23 13:40 J -13190131.00 -13190130.93 -13190130.82 0.0066 0.0055

Mercury -40826-08-19 14:52 J -13190042.97 -13190042.88 -13190042.75 0.0066 0.0050

Mercury -40826-11-15 16:33 J -13189954.93 -13189954.81 -13189954.69 0.0066 0.0045

Venus -40826-12-20 12:57 J -13189920.10 -13189919.96 -13189919.77 0.0066 0.0044

Mercury -40825-02-11 17:30 J -13189866.89 -13189866.77 -13189866.62 0.0066 0.0040

Earth -40825-04-07 01:40 J -13189811.58 -13189811.43 -13189811.25 0.0066 0.0051

Moon -40825-04-07 04:47 J -13189811.46 -13189811.30 -13189811.12 0.0066 0.0049 \*  
 Mercury -40825-05-09 18:42 J -13189778.85 -13189778.72 -13189778.56 0.0066 0.0035  
 Venus -40825-08-01 17:59 J -13189694.96 -13189694.75 -13189694.53 0.0066 0.0002  
 Mercury -40825-08-05 20:23 J -13189690.80 -13189690.65 -13189690.50 0.0066 0.0029  
 Mercury -40825-11-01 21:21 J -13189602.76 -13189602.61 -13189602.44 0.0067 0.0024  
 Mercury -40824-01-28 22:33 J -13189514.71 -13189514.56 -13189514.38 0.0067 0.0019  
 Venus -40824-03-14 22:33 J -13189469.72 -13189469.56 -13189469.39 0.0067 0.0044  
 Mercury -40824-04-26 23:59 J -13189426.66 -13189426.50 -13189426.33 0.0067 0.0013  
 Mercury -40824-07-24 01:26 J -13189338.61 -13189338.44 -13189338.27 0.0067 0.0007  
 Mercury -40824-10-20 02:52 J -13189250.55 -13189250.38 -13189250.21 0.0067 0.0002  
 Mercury -40823-01-16 04:04 J -13189162.50 -13189162.33 -13189162.16 0.0067 0.0004  
 Mercury -40823-04-14 05:30 J -13189074.44 -13189074.27 -13189074.10 0.0067 0.0009  
 Mercury -40823-07-11 06:42 J -13188986.38 -13188986.22 -13188986.05 0.0067 0.0015  
 Mercury -40823-10-07 08:09 J -13188898.32 -13188898.16 -13188898.00 0.0067 0.0021  
 Mercury -40822-01-03 09:21 J -13188810.26 -13188810.11 -13188809.94 0.0067 0.0027  
 Mercury -40822-04-01 10:33 J -13188722.19 -13188722.06 -13188721.89 0.0068 0.0033  
 Mercury -40822-06-28 12:14 J -13188634.12 -13188633.99 -13188633.84 0.0068 0.0038  
 Mercury -40822-09-24 13:40 J -13188546.05 -13188545.93 -13188545.80 0.0068 0.0044  
 Mercury -40822-12-21 14:52 J -13188457.98 -13188457.88 -13188457.75 0.0068 0.0050  
 Mercury -40821-03-18 16:18 J -13188369.90 -13188369.82 -13188369.71 0.0068 0.0056  
 Mercury -40821-06-14 17:30 J -13188281.81 -13188281.77 -13188281.67 0.0068 0.0062  
 Mercury -40821-09-10 19:11 J -13188193.70 -13188193.70 -13188193.67 0.0068 0.0068  
 Mars -40742-03-26 19:54 J -13159507.99 -13159507.67 -13159507.31 0.0080 0.0014  
 Mercury -40739-01-02 06:57 J -13158495.26 -13158495.21 -13158495.14 0.0079 0.0072  
 Mercury -40739-03-31 08:23 J -13158407.22 -13158407.15 -13158407.05 0.0079 0.0064  
 Mercury -40739-06-27 10:04 J -13158319.18 -13158319.08 -13158318.97 0.0078 0.0056  
 Mercury -40739-09-23 11:30 J -13158231.13 -13158231.02 -13158230.90 0.0078 0.0048  
 Earth -40739-10-10 13:40 J -13158214.16 -13158213.93 -13158213.68 0.0078 0.0031  
 Moon -40739-10-10 17:02 J -13158214.02 -13158213.79 -13158213.55 0.0078 0.0030 \*  
 Mercury -40739-12-20 13:11 J -13158143.08 -13158142.95 -13158142.82 0.0078 0.0040



Venus -40738-01-12 04:04 J -13158120.54 -13158120.33 -13158120.11 0.0078 0.0016  
 Mercury -40738-03-18 14:23 J -13158055.03 -13158054.90 -13158054.76 0.0078 0.0032  
 Mercury -40738-06-14 15:50 J -13157966.97 -13157966.84 -13157966.69 0.0078 0.0024  
 Venus -40738-08-25 13:40 J -13157895.07 -13157894.93 -13157894.76 0.0078 0.0056  
 Mercury -40738-09-10 17:30 J -13157878.92 -13157878.77 -13157878.63 0.0078 0.0016  
 Mercury -40738-12-07 18:42 J -13157790.86 -13157790.72 -13157790.57 0.0078 0.0009  
 Mercury -40737-03-04 20:09 J -13157702.80 -13157702.66 -13157702.51 0.0078 0.0002  
 Mercury -40737-05-31 21:35 J -13157614.75 -13157614.60 -13157614.45 0.0077 0.0007  
 Mercury -40737-08-27 23:02 J -13157526.69 -13157526.54 -13157526.40 0.0077 0.0014  
 Mercury -40737-11-24 00:14 J -13157438.63 -13157438.49 -13157438.34 0.0077 0.0022  
 Mercury -40736-02-20 01:26 J -13157350.57 -13157350.44 -13157350.29 0.0077 0.0029  
 Mercury -40736-05-19 02:52 J -13157262.50 -13157262.38 -13157262.24 0.0077 0.0036  
 Mercury -40736-08-15 04:04 J -13157174.44 -13157174.33 -13157174.20 0.0077 0.0044  
 Mercury -40736-11-11 05:16 J -13157086.37 -13157086.28 -13157086.15 0.0077 0.0051  
 Mercury -40735-02-07 06:42 J -13156998.30 -13156998.22 -13156998.11 0.0076 0.0058  
 Mercury -40735-05-06 07:54 J -13156910.23 -13156910.17 -13156910.08 0.0076 0.0065  
 Mercury -40735-08-02 09:21 J -13156822.15 -13156822.11 -13156822.05 0.0076 0.0071  
 Mercury -40580-10-11 01:11 J -13100138.47 -13100138.45 -13100138.38 0.0066 0.0063  
 Mercury -40579-01-07 02:23 J -13100050.45 -13100050.40 -13100050.29 0.0066 0.0058  
 Mercury -40579-04-05 04:04 J -13099962.42 -13099962.33 -13099962.22 0.0066 0.0052  
 Earth -40579-04-08 10:04 J -13099959.33 -13099959.08 -13099958.81 0.0066 0.0002  
 Moon -40579-04-08 10:47 J -13099959.32 -13099959.05 -13099958.78 0.0066 0.0004 \*  
 Mercury -40579-07-02 05:16 J -13099874.39 -13099874.28 -13099874.16 0.0066 0.0047  
 Venus -40579-08-30 17:30 J -13099814.97 -13099814.77 -13099814.57 0.0066 0.0025  
 Mercury -40579-09-28 06:28 J -13099786.35 -13099786.23 -13099786.09 0.0066 0.0042  
 Mercury -40579-12-25 07:40 J -13099698.31 -13099698.18 -13099698.03 0.0066 0.0037  
 Mercury -40578-03-23 09:06 J -13099610.26 -13099610.12 -13099609.97 0.0066 0.0032  
 Venus -40578-04-12 21:50 J -13099589.79 -13099589.59 -13099589.37 0.0066 0.0019  
 Mercury -40578-06-19 10:18 J -13099522.22 -13099522.07 -13099521.91 0.0067 0.0026  
 Mercury -40578-09-15 11:45 J -13099434.17 -13099434.01 -13099433.85 0.0067 0.0021

Venus -40578-11-24 01:54 J -13099364.47 -13099364.42 -13099364.32 0.0067 0.0063

Mercury -40578-12-12 12:57 J -13099346.12 -13099345.96 -13099345.79 0.0067 0.0016

Mercury -40577-03-09 14:23 J -13099258.07 -13099257.90 -13099257.73 0.0067 0.0010

Mercury -40577-06-05 15:35 J -13099170.01 -13099169.85 -13099169.68 0.0067 0.0005

Mercury -40577-09-01 17:02 J -13099081.96 -13099081.79 -13099081.62 0.0067 0.0001

Mercury -40577-11-28 18:14 J -13098993.90 -13098993.74 -13098993.57 0.0067 0.0007

Mercury -40576-02-24 19:40 J -13098905.85 -13098905.68 -13098905.51 0.0067 0.0012

Mercury -40576-05-23 20:52 J -13098817.79 -13098817.63 -13098817.46 0.0067 0.0018

Mercury -40576-08-19 22:18 J -13098729.72 -13098729.57 -13098729.41 0.0067 0.0024

Mercury -40576-11-15 23:30 J -13098641.66 -13098641.52 -13098641.35 0.0068 0.0030

Mercury -40575-02-12 00:57 J -13098553.59 -13098553.46 -13098553.30 0.0068 0.0036

Mercury -40575-05-11 02:09 J -13098465.53 -13098465.41 -13098465.26 0.0068 0.0042

Mercury -40575-08-07 03:50 J -13098377.45 -13098377.34 -13098377.21 0.0068 0.0047

Mercury -40575-11-03 05:16 J -13098289.38 -13098289.28 -13098289.17 0.0068 0.0053

Mercury -40574-01-30 06:42 J -13098201.29 -13098201.22 -13098201.13 0.0068 0.0059

Mercury -40574-04-28 08:09 J -13098113.20 -13098113.16 -13098113.11 0.0068 0.0065

Mars -40496-08-14 21:50 J -13069514.74 -13069514.59 -13069514.34 0.0080 0.0067

Jupiter -40494-04-02 20:23 J -13068919.16 -13068918.65 -13068918.12 0.0079 0.0017

Mercury -40493-08-18 20:09 J -13068414.69 -13068414.66 -13068414.61 0.0079 0.0075

Earth -40493-10-10 13:11 J -13068362.11 -13068361.95 -13068361.74 0.0079 0.0056

Moon -40493-10-10 14:09 J -13068362.10 -13068361.91 -13068361.71 0.0079 0.0054 \*

Mercury -40493-11-14 21:35 J -13068326.66 -13068326.60 -13068326.51 0.0078 0.0067

Venus -40492-02-08 21:21 J -13068240.71 -13068240.61 -13068240.47 0.0078 0.0066

Mercury -40492-02-10 23:16 J -13068238.62 -13068238.53 -13068238.43 0.0078 0.0059

Mercury -40492-05-10 00:42 J -13068150.58 -13068150.47 -13068150.35 0.0078 0.0051

Mercury -40492-08-06 02:23 J -13068062.53 -13068062.40 -13068062.28 0.0078 0.0043

Venus -40492-09-22 07:40 J -13068015.40 -13068015.18 -13068014.95 0.0078 0.0008

Earth -40492-10-12 16:04 J -13067994.86 -13067994.83 -13067994.74 0.0078 0.0076

Moon -40492-10-12 17:02 J -13067994.83 -13067994.79 -13067994.69 0.0078 0.0075 \*

Mercury -40492-11-02 03:35 J -13067974.47 -13067974.35 -13067974.21 0.0078 0.0035

Mercury -40491-01-29 05:02 J -13067886.42 -13067886.29 -13067886.14 0.0078 0.0027  
 Mercury -40491-04-27 06:42 J -13067798.36 -13067798.22 -13067798.08 0.0078 0.0019  
 Mercury -40491-07-24 08:09 J -13067710.31 -13067710.16 -13067710.01 0.0078 0.0011  
 Mercury -40491-10-20 09:35 J -13067622.25 -13067622.10 -13067621.95 0.0077 0.0004  
 Mercury -40490-01-16 10:47 J -13067534.19 -13067534.05 -13067533.90 0.0077 0.0004  
 Mercury -40490-04-14 12:14 J -13067446.13 -13067445.99 -13067445.84 0.0077 0.0011  
 Mercury -40490-07-11 13:40 J -13067358.08 -13067357.93 -13067357.79 0.0077 0.0019  
 Mercury -40490-10-07 14:52 J -13067270.01 -13067269.88 -13067269.74 0.0077 0.0026  
 Mercury -40489-01-03 16:18 J -13067181.95 -13067181.82 -13067181.69 0.0077 0.0033  
 Mercury -40489-03-31 17:16 J -13067093.89 -13067093.78 -13067093.64 0.0077 0.0041  
 Mercury -40489-06-27 18:42 J -13067005.83 -13067005.72 -13067005.60 0.0077 0.0048  
 Mercury -40489-09-23 19:54 J -13066917.76 -13066917.67 -13066917.56 0.0076 0.0055  
 Mercury -40489-12-20 21:21 J -13066829.69 -13066829.61 -13066829.52 0.0076 0.0061  
 Mercury -40488-03-18 22:33 J -13066741.61 -13066741.56 -13066741.49 0.0076 0.0068  
 Mercury -40488-06-14 23:45 J -13066653.52 -13066653.51 -13066653.48 0.0076 0.0075  
 Mars -40337-07-17 22:18 J -13011467.75 -13011467.57 -13011467.33 0.0064 0.0046  
 Mercury -40333-08-23 13:54 J -13009969.94 -13009969.92 -13009969.86 0.0066 0.0064  
 Venus -40333-09-27 12:57 J -13009935.02 -13009934.96 -13009934.86 0.0066 0.0061  
 Mercury -40333-11-19 15:06 J -13009881.92 -13009881.87 -13009881.77 0.0066 0.0059  
 Mercury -40332-02-15 16:18 J -13009793.89 -13009793.82 -13009793.70 0.0066 0.0054  
 Earth -40332-04-10 02:38 J -13009740.63 -13009740.39 -13009740.12 0.0066 0.0012  
 Moon -40332-04-10 05:30 J -13009740.51 -13009740.27 -13009740.00 0.0066 0.0015 \*  
 Venus -40332-05-10 17:45 J -13009709.97 -13009709.76 -13009709.55 0.0066 0.0019  
 Mercury -40332-05-14 17:59 J -13009705.86 -13009705.75 -13009705.63 0.0066 0.0048  
 Mercury -40332-08-10 19:11 J -13009617.82 -13009617.70 -13009617.57 0.0066 0.0043  
 Mercury -40332-11-06 20:09 J -13009529.78 -13009529.66 -13009529.50 0.0066 0.0039  
 Venus -40332-12-21 22:18 J -13009484.77 -13009484.57 -13009484.36 0.0066 0.0025  
 Mercury -40331-02-02 21:50 J -13009441.73 -13009441.59 -13009441.44 0.0066 0.0033  
 Mercury -40331-05-01 23:02 J -13009353.69 -13009353.54 -13009353.38 0.0067 0.0028  
 Mercury -40331-07-29 00:28 J -13009265.64 -13009265.48 -13009265.32 0.0067 0.0022

Mercury -40331-10-25 01:40 J -13009177.59 -13009177.43 -13009177.26 0.0067 0.0017  
 Mercury -40330-01-21 03:06 J -13009089.54 -13009089.37 -13009089.20 0.0067 0.0011  
 Mercury -40330-04-19 04:18 J -13009001.48 -13009001.32 -13009001.15 0.0067 0.0006  
 Mercury -40330-07-16 05:45 J -13008913.43 -13008913.26 -13008913.09 0.0067 0.0000  
 Mercury -40330-10-12 06:57 J -13008825.37 -13008825.21 -13008825.03 0.0067 0.0006  
 Mercury -40329-01-08 08:23 J -13008737.31 -13008737.15 -13008736.98 0.0067 0.0011  
 Mercury -40329-04-05 09:35 J -13008649.26 -13008649.10 -13008648.93 0.0067 0.0017  
 Mercury -40329-07-02 11:02 J -13008561.19 -13008561.04 -13008560.87 0.0067 0.0023  
 Mercury -40329-09-28 12:28 J -13008473.13 -13008472.98 -13008472.82 0.0068 0.0029  
 Mercury -40329-12-25 13:40 J -13008385.06 -13008384.93 -13008384.77 0.0068 0.0035  
 Mercury -40328-03-23 15:21 J -13008297.00 -13008296.86 -13008296.72 0.0068 0.0040  
 Mercury -40328-06-19 16:47 J -13008208.92 -13008208.80 -13008208.68 0.0068 0.0046  
 Mercury -40328-09-15 17:59 J -13008120.85 -13008120.75 -13008120.63 0.0068 0.0052  
 Mercury -40328-12-12 19:26 J -13008032.77 -13008032.69 -13008032.59 0.0068 0.0058  
 Mercury -40327-03-10 20:52 J -13007944.67 -13007944.63 -13007944.57 0.0068 0.0065  
 Mercury -40246-07-02 09:35 J -12978246.13 -12978246.10 -12978246.03 0.0079 0.0074  
 Mercury -40246-09-28 11:16 J -12978158.10 -12978158.03 -12978157.94 0.0078 0.0066  
 Earth -40246-10-13 11:16 J -12978143.27 -12978143.03 -12978142.78 0.0078 0.0025  
 Moon -40246-10-13 13:54 J -12978143.16 -12978142.92 -12978142.67 0.0078 0.0028 \*  
 Venus -40246-10-20 21:35 J -12978135.74 -12978135.60 -12978135.43 0.0078 0.0056  
 Mercury -40246-12-25 12:42 J -12978070.06 -12978069.97 -12978069.86 0.0078 0.0058  
 Mercury -40245-03-22 14:23 J -12977982.01 -12977981.90 -12977981.78 0.0078 0.0049  
 Venus -40245-06-02 07:54 J -12977910.39 -12977910.17 -12977909.95 0.0078 0.0017  
 Mercury -40245-06-18 15:50 J -12977893.96 -12977893.84 -12977893.71 0.0078 0.0041  
 Mercury -40245-09-14 17:02 J -12977805.91 -12977805.79 -12977805.64 0.0078 0.0034  
 Mercury -40245-12-11 18:42 J -12977717.86 -12977717.72 -12977717.58 0.0078 0.0026  
 Mercury -40244-03-09 20:09 J -12977629.80 -12977629.66 -12977629.51 0.0078 0.0018  
 Mercury -40244-06-05 21:35 J -12977541.74 -12977541.60 -12977541.45 0.0077 0.0011  
 Mercury -40244-09-01 23:02 J -12977453.69 -12977453.54 -12977453.39 0.0077 0.0003  
 Mercury -40244-11-29 00:28 J -12977365.63 -12977365.48 -12977365.33 0.0077 0.0005

Mercury -40243-02-25 01:40 J -12977277.57 -12977277.43 -12977277.28 0.0077 0.0013  
 Mercury -40243-05-24 03:06 J -12977189.51 -12977189.37 -12977189.22 0.0077 0.0019  
 Mercury -40243-08-20 04:18 J -12977101.45 -12977101.32 -12977101.17 0.0077 0.0027  
 Mercury -40243-11-16 05:45 J -12977013.39 -12977013.26 -12977013.12 0.0077 0.0034  
 Mercury -40242-02-12 07:11 J -12976925.32 -12976925.20 -12976925.08 0.0077 0.0041  
 Mercury -40242-05-11 08:09 J -12976837.26 -12976837.16 -12976837.03 0.0076 0.0049  
 Mercury -40242-08-07 09:35 J -12976749.19 -12976749.10 -12976748.99 0.0076 0.0055  
 Mercury -40242-11-03 10:47 J -12976661.12 -12976661.05 -12976660.95 0.0076 0.0062  
 Mercury -40241-01-30 11:59 J -12976573.04 -12976573.00 -12976572.93 0.0076 0.0069  
 Mercury -40241-04-27 13:26 J -12976484.94 -12976484.94 -12976484.92 0.0076 0.0076  
 Mars -40091-12-07 23:02 J -12921473.82 -12921473.54 -12921473.24 0.0064 0.0007  
 Moon -40086-04-10 22:33 J -12919888.65 -12919888.56 -12919888.44 0.0066 0.0060  
 Earth -40086-04-11 01:26 J -12919888.50 -12919888.44 -12919888.33 0.0066 0.0062 \*  
 Venus -40086-06-08 11:02 J -12919830.08 -12919830.04 -12919829.95 0.0066 0.0063  
 Mercury -40086-10-03 03:06 J -12919713.41 -12919713.37 -12919713.30 0.0066 0.0062  
 Mercury -40086-12-30 04:18 J -12919625.39 -12919625.32 -12919625.22 0.0066 0.0057  
 Venus -40085-01-19 16:04 J -12919605.03 -12919604.83 -12919604.62 0.0066 0.0020  
 Mercury -40085-03-27 05:30 J -12919537.36 -12919537.27 -12919537.15 0.0066 0.0052  
 Earth -40085-04-11 15:50 J -12919522.08 -12919521.84 -12919521.58 0.0066 0.0017  
 Moon -40085-04-11 19:26 J -12919521.93 -12919521.69 -12919521.42 0.0066 0.0015 \*  
 Mercury -40085-06-23 06:42 J -12919449.32 -12919449.22 -12919449.09 0.0066 0.0047  
 Venus -40085-08-31 20:38 J -12919379.84 -12919379.64 -12919379.43 0.0066 0.0023  
 Mercury -40085-09-19 08:09 J -12919361.28 -12919361.16 -12919361.02 0.0066 0.0042  
 Mercury -40085-12-16 09:21 J -12919273.24 -12919273.11 -12919272.96 0.0066 0.0037  
 Mercury -40084-03-14 11:02 J -12919185.19 -12919185.04 -12919184.90 0.0067 0.0031  
 Mercury -40084-06-10 11:59 J -12919097.15 -12919097.00 -12919096.83 0.0067 0.0026  
 Mercury -40084-09-06 13:11 J -12919009.10 -12919008.95 -12919008.77 0.0067 0.0021  
 Mercury -40084-12-03 14:38 J -12918921.05 -12918920.89 -12918920.72 0.0067 0.0015  
 Mercury -40083-03-01 16:04 J -12918832.99 -12918832.83 -12918832.66 0.0067 0.0009  
 Mercury -40083-05-28 17:30 J -12918744.94 -12918744.77 -12918744.60 0.0067 0.0004

Mercury -40083-08-24 18:42 J -12918656.88 -12918656.72 -12918656.55 0.0067 0.0003

Mercury -40083-11-20 20:09 J -12918568.83 -12918568.66 -12918568.49 0.0067 0.0007

Mercury -40082-02-16 21:21 J -12918480.77 -12918480.61 -12918480.43 0.0067 0.0014

Mercury -40082-05-15 23:02 J -12918392.71 -12918392.54 -12918392.38 0.0067 0.0019

Mercury -40082-08-12 00:14 J -12918304.65 -12918304.49 -12918304.33 0.0068 0.0025

Mercury -40082-11-08 01:26 J -12918216.58 -12918216.44 -12918216.28 0.0068 0.0031

Mercury -40081-02-04 02:38 J -12918128.51 -12918128.39 -12918128.23 0.0068 0.0037

Mercury -40081-05-02 04:33 J -12918040.44 -12918040.31 -12918040.18 0.0068 0.0042

Mercury -40081-07-29 05:45 J -12917952.37 -12917952.26 -12917952.13 0.0068 0.0048

Mercury -40081-10-25 07:11 J -12917864.29 -12917864.20 -12917864.09 0.0068 0.0054

Mercury -40080-01-21 08:38 J -12917776.21 -12917776.14 -12917776.05 0.0068 0.0061

Mercury -40080-04-19 10:04 J -12917688.10 -12917688.08 -12917688.04 0.0068 0.0067

# 40TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 40th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-39999-05-14 21:35 J	-12888077.60	-12888077.60	-12888077.58	0.0079	0.0078		
Venus	-39999-06-30 16:47 J	-12888030.90	-12888030.80	-12888030.67	0.0078	0.0067		
Mercury	-39999-08-10 23:02 J	-12887989.59	-12887989.54	-12887989.46	0.0078	0.0070		
Earth	-39999-10-15 00:42 J	-12887924.71	-12887924.47	-12887924.21	0.0078	0.0017		
Moon	-39999-10-15 04:04 J	-12887924.57	-12887924.33	-12887924.06	0.0078	0.0014 *		
Mercury	-39999-11-07 00:28 J	-12887901.55	-12887901.48	-12887901.37	0.0078	0.0062		

Mercury -39998-02-03 01:54 J -12887813.51 -12887813.42 -12887813.29 0.0078 0.0055

Venus -39998-02-11 02:52 J -12887805.60 -12887805.38 -12887805.15 0.0078 0.0007

Mercury -39998-05-02 03:35 J -12887725.46 -12887725.35 -12887725.22 0.0078 0.0046

Mercury -39998-07-29 05:02 J -12887637.41 -12887637.29 -12887637.15 0.0078 0.0038

Mercury -39998-10-25 06:42 J -12887549.36 -12887549.22 -12887549.08 0.0078 0.0030

Mercury -39997-01-21 07:54 J -12887461.30 -12887461.17 -12887461.02 0.0078 0.0023

Mercury -39997-04-18 09:35 J -12887373.25 -12887373.10 -12887372.96 0.0077 0.0015

Mercury -39997-07-15 11:02 J -12887285.19 -12887285.04 -12887284.89 0.0077 0.0007

Mercury -39997-10-11 12:28 J -12887197.13 -12887196.98 -12887196.84 0.0077 0.0002

Mercury -39996-01-07 13:40 J -12887109.07 -12887108.93 -12887108.78 0.0077 0.0008

Mercury -39996-04-05 15:06 J -12887021.02 -12887020.87 -12887020.73 0.0077 0.0015

Mercury -39996-07-02 16:18 J -12886932.96 -12886932.82 -12886932.67 0.0077 0.0023

Mercury -39996-09-28 17:45 J -12886844.89 -12886844.76 -12886844.62 0.0077 0.0030

Mercury -39996-12-25 18:57 J -12886756.83 -12886756.71 -12886756.57 0.0076 0.0037

Mercury -39995-03-23 20:23 J -12886668.77 -12886668.65 -12886668.53 0.0076 0.0044

Mercury -39995-06-19 21:21 J -12886580.70 -12886580.61 -12886580.49 0.0076 0.0051

Mercury -39995-09-15 22:47 J -12886492.63 -12886492.55 -12886492.45 0.0076 0.0058

Mercury -39995-12-12 23:59 J -12886404.56 -12886404.50 -12886404.41 0.0076 0.0065

Mercury -39994-03-11 01:11 J -12886316.48 -12886316.45 -12886316.39 0.0076 0.0072

Venus -39839-09-29 09:50 J -12829500.25 -12829500.09 -12829499.89 0.0066 0.0037

Mercury -39839-11-11 14:09 J -12829456.92 -12829456.91 -12829456.87 0.0066 0.0065

Mercury -39838-02-07 15:21 J -12829368.91 -12829368.86 -12829368.77 0.0066 0.0060

Earth -39838-04-13 22:04 J -12829303.83 -12829303.58 -12829303.32 0.0066 0.0004

Moon -39838-04-14 01:26 J -12829303.69 -12829303.44 -12829303.18 0.0066 0.0003 \*

Mercury -39838-05-06 16:33 J -12829280.88 -12829280.81 -12829280.70 0.0066 0.0055

Venus -39838-05-12 14:38 J -12829275.11 -12829274.89 -12829274.67 0.0066 0.0006

Mercury -39838-08-02 18:14 J -12829192.85 -12829192.74 -12829192.63 0.0066 0.0050

Mercury -39838-10-29 19:11 J -12829104.81 -12829104.70 -12829104.56 0.0066 0.0045

Venus -39838-12-23 18:42 J -12829049.85 -12829049.72 -12829049.56 0.0066 0.0050

Mercury -39837-01-25 20:23 J -12829016.77 -12829016.65 -12829016.50 0.0066 0.0040

Mercury -39837-04-22 22:04 J -12828928.72 -12828928.58 -12828928.43 0.0067 0.0034

Mercury -39837-07-19 23:02 J -12828840.68 -12828840.54 -12828840.37 0.0067 0.0029

Mercury -39837-10-16 00:42 J -12828752.63 -12828752.47 -12828752.31 0.0067 0.0023

Mercury -39836-01-12 01:40 J -12828664.58 -12828664.43 -12828664.25 0.0067 0.0018

Mercury -39836-04-10 03:21 J -12828576.53 -12828576.36 -12828576.20 0.0067 0.0012

Mercury -39836-07-07 04:33 J -12828488.48 -12828488.31 -12828488.14 0.0067 0.0007

Mercury -39836-10-03 05:59 J -12828400.42 -12828400.25 -12828400.08 0.0067 0.0001

Mercury -39836-12-30 07:11 J -12828312.36 -12828312.20 -12828312.03 0.0067 0.0005

Mercury -39835-03-28 08:38 J -12828224.31 -12828224.14 -12828223.97 0.0067 0.0010

Mercury -39835-06-24 09:50 J -12828136.25 -12828136.09 -12828135.92 0.0067 0.0016

Mercury -39835-09-20 11:16 J -12828048.18 -12828048.03 -12828047.86 0.0068 0.0022

Mercury -39835-12-17 12:42 J -12827960.12 -12827959.97 -12827959.81 0.0068 0.0028

Mercury -39834-03-15 13:54 J -12827872.05 -12827871.92 -12827871.76 0.0068 0.0034

Mercury -39834-06-11 15:06 J -12827783.99 -12827783.87 -12827783.71 0.0068 0.0040

Mercury -39834-09-07 17:02 J -12827695.91 -12827695.79 -12827695.66 0.0068 0.0045

Mercury -39834-12-04 18:28 J -12827607.84 -12827607.73 -12827607.62 0.0068 0.0051

Mercury -39833-03-01 19:40 J -12827519.76 -12827519.68 -12827519.58 0.0068 0.0058

Mercury -39833-05-28 21:21 J -12827431.67 -12827431.61 -12827431.55 0.0068 0.0064

Mars -39755-09-04 14:23 J -12798844.19 -12798843.90 -12798843.59 0.0080 0.0040

Saturn -39752-05-25 00:14 J -12797850.86 -12797850.49 -12797849.98 0.0079 0.0062

Mercury -39752-09-19 11:02 J -12797733.09 -12797733.04 -12797732.98 0.0078 0.0072

Earth -39752-10-16 06:42 J -12797706.44 -12797706.22 -12797705.96 0.0078 0.0033

Moon -39752-10-16 10:04 J -12797706.31 -12797706.08 -12797705.85 0.0078 0.0035 \*

Venus -39752-10-21 17:30 J -12797700.98 -12797700.77 -12797700.56 0.0078 0.0025

Mercury -39752-12-16 12:28 J -12797645.05 -12797644.98 -12797644.89 0.0078 0.0064

Mercury -39751-03-14 13:54 J -12797557.01 -12797556.92 -12797556.80 0.0078 0.0056

Venus -39751-06-04 03:06 J -12797475.53 -12797475.37 -12797475.18 0.0078 0.0048

Mercury -39751-06-10 15:35 J -12797468.96 -12797468.85 -12797468.73 0.0078 0.0048

Mercury -39751-09-06 16:47 J -12797380.91 -12797380.80 -12797380.66 0.0078 0.0041

Mercury -39751-12-03 18:28 J -12797292.86 -12797292.73 -12797292.59 0.0078 0.0033



Mercury -39750-03-01 19:54 J -12797204.81 -12797204.67 -12797204.52 0.0078 0.0025

Mercury -39750-05-28 21:21 J -12797116.75 -12797116.61 -12797116.46 0.0077 0.0017

Mercury -39750-08-24 22:47 J -12797028.70 -12797028.55 -12797028.40 0.0077 0.0009

Mercury -39750-11-21 00:14 J -12796940.64 -12796940.49 -12796940.34 0.0077 0.0002

Mercury -39749-02-17 01:40 J -12796852.58 -12796852.43 -12796852.28 0.0077 0.0006

Mercury -39749-05-15 02:52 J -12796764.52 -12796764.38 -12796764.23 0.0077 0.0013

Mercury -39749-08-11 04:18 J -12796676.46 -12796676.32 -12796676.18 0.0077 0.0020

Mercury -39749-11-07 05:30 J -12796588.40 -12796588.27 -12796588.13 0.0077 0.0028

Mercury -39748-02-03 06:57 J -12796500.34 -12796500.21 -12796500.08 0.0076 0.0035

Mercury -39748-05-02 08:09 J -12796412.28 -12796412.16 -12796412.03 0.0076 0.0042

Mercury -39748-07-29 09:35 J -12796324.21 -12796324.10 -12796323.99 0.0076 0.0049

Mercury -39748-10-25 10:33 J -12796236.14 -12796236.06 -12796235.95 0.0076 0.0056

Mercury -39747-01-21 11:45 J -12796148.07 -12796148.01 -12796147.91 0.0076 0.0063

Mercury -39747-04-19 13:26 J -12796060.00 -12796059.94 -12796059.88 0.0076 0.0069

Mars -39596-08-08 11:30 J -12740796.21 -12740796.02 -12740795.76 0.0064 0.0042

Venus -39592-06-09 02:23 J -12739395.48 -12739395.40 -12739395.29 0.0066 0.0059

Venus -39591-01-20 06:57 J -12739170.41 -12739170.21 -12739169.98 0.0066 0.0017

Mercury -39591-03-19 01:40 J -12739112.43 -12739112.43 -12739112.37 0.0066 0.0066

Earth -39591-04-15 01:11 J -12739085.68 -12739085.45 -12739085.18 0.0066 0.0016

Moon -39591-04-15 03:21 J -12739085.59 -12739085.36 -12739085.09 0.0066 0.0012 \*

Mercury -39591-06-15 03:21 J -12739024.42 -12739024.36 -12739024.28 0.0066 0.0060

Venus -39591-09-02 11:30 J -12738945.21 -12738945.02 -12738944.81 0.0066 0.0026

Mercury -39591-09-11 04:33 J -12738936.39 -12738936.31 -12738936.21 0.0066 0.0055

Mercury -39591-12-08 05:45 J -12738848.36 -12738848.26 -12738848.14 0.0066 0.0049

Mercury -39590-03-06 06:42 J -12738760.32 -12738760.22 -12738760.07 0.0066 0.0045

Moon -39590-04-16 12:14 J -12738719.06 -12738718.99 -12738718.86 0.0066 0.0062

Earth -39590-04-16 15:50 J -12738718.88 -12738718.84 -12738718.77 0.0066 0.0065 \*

Mercury -39590-06-02 08:23 J -12738672.28 -12738672.15 -12738672.01 0.0067 0.0039

Mercury -39590-08-29 09:35 J -12738584.24 -12738584.10 -12738583.95 0.0067 0.0034

Mercury -39590-11-25 11:02 J -12738496.19 -12738496.04 -12738495.88 0.0067 0.0028

Mercury -39589-02-21 12:14 J -12738408.14 -12738407.99 -12738407.82 0.0067 0.0023  
 Mercury -39589-05-19 13:40 J -12738320.09 -12738319.93 -12738319.77 0.0067 0.0017  
 Mercury -39589-08-15 14:52 J -12738232.04 -12738231.88 -12738231.71 0.0067 0.0012  
 Mercury -39589-11-11 16:18 J -12738143.99 -12738143.82 -12738143.65 0.0067 0.0006  
 Mercury -39588-02-07 17:45 J -12738055.93 -12738055.76 -12738055.59 0.0067 0.0001  
 Mercury -39588-05-06 18:57 J -12737967.87 -12737967.71 -12737967.54 0.0067 0.0006  
 Mercury -39588-08-02 20:09 J -12737879.82 -12737879.66 -12737879.48 0.0067 0.0012  
 Mercury -39588-10-29 21:35 J -12737791.76 -12737791.60 -12737791.43 0.0068 0.0017  
 Mercury -39587-01-25 23:02 J -12737703.69 -12737703.54 -12737703.37 0.0068 0.0023  
 Mercury -39587-04-24 00:14 J -12737615.63 -12737615.49 -12737615.32 0.0068 0.0029  
 Mercury -39587-07-21 01:54 J -12737527.56 -12737527.42 -12737527.27 0.0068 0.0034  
 Mercury -39587-10-17 03:21 J -12737439.49 -12737439.36 -12737439.22 0.0068 0.0040  
 Mercury -39586-01-13 04:33 J -12737351.42 -12737351.31 -12737351.17 0.0068 0.0046  
 Mercury -39586-04-11 05:59 J -12737263.34 -12737263.25 -12737263.13 0.0068 0.0052  
 Mercury -39586-07-08 07:26 J -12737175.26 -12737175.19 -12737175.09 0.0068 0.0059  
 Mercury -39586-10-04 08:52 J -12737087.17 -12737087.13 -12737087.06 0.0068 0.0065  
 Venus -39505-07-01 03:06 J -12707596.40 -12707596.37 -12707596.28 0.0079 0.0076  
 Earth -39505-10-17 05:45 J -12707488.35 -12707488.26 -12707488.10 0.0078 0.0069  
 Moon -39505-10-17 07:40 J -12707488.27 -12707488.18 -12707488.03 0.0078 0.0070 \*  
 Mercury -39504-01-24 22:47 J -12707388.59 -12707388.55 -12707388.48 0.0078 0.0072  
 Venus -39504-02-11 13:54 J -12707371.15 -12707370.92 -12707370.70 0.0078 0.0001  
 Mercury -39504-04-23 00:14 J -12707300.56 -12707300.49 -12707300.39 0.0078 0.0065  
 Mercury -39504-07-20 01:54 J -12707212.51 -12707212.42 -12707212.31 0.0078 0.0056  
 Venus -39504-09-24 23:30 J -12707145.60 -12707145.52 -12707145.43 0.0078 0.0071  
 Mercury -39504-10-16 03:21 J -12707124.47 -12707124.36 -12707124.23 0.0078 0.0048  
 Moon -39504-10-19 05:16 J -12707121.39 -12707121.28 -12707121.10 0.0078 0.0065  
 Earth -39504-10-19 08:38 J -12707121.26 -12707121.14 -12707120.96 0.0078 0.0063 \*  
 Mercury -39503-01-12 05:02 J -12707036.42 -12707036.29 -12707036.16 0.0078 0.0040  
 Mercury -39503-04-10 06:14 J -12706948.36 -12706948.24 -12706948.09 0.0078 0.0033  
 Mercury -39503-07-07 07:40 J -12706860.31 -12706860.18 -12706860.03 0.0077 0.0025

Mercury -39503-10-03 09:21 J -12706772.26 -12706772.11 -12706771.97 0.0077 0.0017  
 Mercury -39503-12-30 10:33 J -12706684.20 -12706684.06 -12706683.91 0.0077 0.0010  
 Mercury -39502-03-28 11:59 J -12706596.14 -12706596.00 -12706595.85 0.0077 0.0002  
 Mercury -39502-06-24 13:26 J -12706508.09 -12706507.94 -12706507.79 0.0077 0.0006  
 Mercury -39502-09-20 14:52 J -12706420.03 -12706419.88 -12706419.74 0.0077 0.0013  
 Mercury -39502-12-17 16:04 J -12706331.97 -12706331.83 -12706331.68 0.0077 0.0021  
 Mercury -39501-03-14 17:30 J -12706243.91 -12706243.77 -12706243.63 0.0076 0.0028  
 Mercury -39501-06-10 18:28 J -12706155.85 -12706155.73 -12706155.59 0.0076 0.0036  
 Mercury -39501-09-06 19:54 J -12706067.78 -12706067.67 -12706067.54 0.0076 0.0042  
 Mercury -39501-12-03 21:06 J -12705979.72 -12705979.62 -12705979.50 0.0076 0.0049  
 Mercury -39500-03-01 22:18 J -12705891.65 -12705891.57 -12705891.46 0.0076 0.0056  
 Mercury -39500-05-28 23:45 J -12705803.58 -12705803.51 -12705803.42 0.0076 0.0063  
 Mercury -39500-08-25 00:57 J -12705715.50 -12705715.46 -12705715.39 0.0076 0.0070  
 Mars -39350-12-28 14:09 J -12650802.98 -12650802.91 -12650802.82 0.0064 0.0061  
 Venus -39345-09-29 20:38 J -12649065.76 -12649065.64 -12649065.48 0.0066 0.0050  
 Earth -39344-04-15 23:59 J -12648867.67 -12648867.50 -12648867.30 0.0066 0.0046  
 Moon -39344-04-16 00:14 J -12648867.63 -12648867.49 -12648867.30 0.0066 0.0049 \*  
 Venus -39344-05-13 01:26 J -12648840.66 -12648840.44 -12648840.22 0.0066 0.0007  
 Mercury -39344-10-20 13:26 J -12648679.96 -12648679.94 -12648679.86 0.0066 0.0064  
 Venus -39344-12-24 05:45 J -12648615.44 -12648615.26 -12648615.07 0.0066 0.0036  
 Mercury -39343-01-16 15:06 J -12648591.94 -12648591.87 -12648591.78 0.0066 0.0058  
 Mercury -39343-04-14 16:18 J -12648503.91 -12648503.82 -12648503.71 0.0066 0.0053  
 Moon -39343-04-17 12:14 J -12648501.19 -12648500.99 -12648500.74 0.0066 0.0036  
 Earth -39343-04-17 14:38 J -12648501.11 -12648500.89 -12648500.66 0.0066 0.0033 \*  
 Mercury -39343-07-11 17:16 J -12648415.87 -12648415.78 -12648415.64 0.0066 0.0048  
 Mercury -39343-10-07 18:57 J -12648327.83 -12648327.71 -12648327.58 0.0067 0.0042  
 Mercury -39342-01-03 19:54 J -12648239.79 -12648239.67 -12648239.51 0.0067 0.0037  
 Mercury -39342-04-01 21:35 J -12648151.75 -12648151.60 -12648151.45 0.0067 0.0031  
 Mercury -39342-06-28 22:33 J -12648063.70 -12648063.56 -12648063.39 0.0067 0.0026  
 Mercury -39342-09-24 23:59 J -12647975.65 -12647975.50 -12647975.33 0.0067 0.0020

Mercury -39342-12-22 01:11 J -12647887.60 -12647887.45 -12647887.27 0.0067 0.0015

Mercury -39341-03-19 02:38 J -12647799.55 -12647799.39 -12647799.21 0.0067 0.0010

Mercury -39341-06-15 04:04 J -12647711.50 -12647711.33 -12647711.16 0.0067 0.0004

Mercury -39341-09-11 05:30 J -12647623.44 -12647623.27 -12647623.10 0.0067 0.0002

Mercury -39341-12-08 06:42 J -12647535.38 -12647535.22 -12647535.05 0.0067 0.0008

Mercury -39340-03-06 08:09 J -12647447.32 -12647447.16 -12647446.99 0.0068 0.0014

Mercury -39340-06-02 09:21 J -12647359.26 -12647359.11 -12647358.94 0.0068 0.0020

Mercury -39340-08-29 10:47 J -12647271.20 -12647271.05 -12647270.88 0.0068 0.0026

Mercury -39340-11-25 12:14 J -12647183.13 -12647182.99 -12647182.83 0.0068 0.0031

Mercury -39339-02-21 13:40 J -12647095.07 -12647094.93 -12647094.78 0.0068 0.0037

Mercury -39339-05-20 14:52 J -12647007.00 -12647006.88 -12647006.73 0.0068 0.0044

Mercury -39339-08-16 16:18 J -12646918.92 -12646918.82 -12646918.69 0.0068 0.0050

Mercury -39339-11-12 17:45 J -12646830.84 -12646830.76 -12646830.65 0.0068 0.0056

Mercury -39338-02-08 19:11 J -12646742.76 -12646742.70 -12646742.61 0.0068 0.0062

Mercury -39338-05-07 20:52 J -12646654.64 -12646654.63 -12646654.60 0.0068 0.0068

Mars -39260-05-04 00:57 J -12618168.55 -12618168.46 -12618168.29 0.0080 0.0074

Venus -39258-10-22 20:23 J -12617266.75 -12617266.65 -12617266.50 0.0079 0.0065

Mercury -39257-06-01 09:50 J -12617044.12 -12617044.09 -12617044.04 0.0078 0.0075

Venus -39257-06-04 06:57 J -12617041.43 -12617041.21 -12617040.98 0.0078 0.0010

Mercury -39257-08-28 11:16 J -12616956.09 -12616956.03 -12616955.94 0.0078 0.0067

Moon -39257-10-20 01:54 J -12616903.68 -12616903.42 -12616903.15 0.0078 0.0010

Earth -39257-10-20 03:50 J -12616903.58 -12616903.34 -12616903.08 0.0078 0.0014 \*

Mercury -39257-11-24 12:57 J -12616868.05 -12616867.96 -12616867.86 0.0078 0.0059

Mercury -39256-02-20 14:23 J -12616780.00 -12616779.90 -12616779.78 0.0078 0.0051

Mercury -39256-05-19 16:04 J -12616691.96 -12616691.83 -12616691.71 0.0078 0.0043

Mercury -39256-08-15 17:16 J -12616603.90 -12616603.78 -12616603.64 0.0078 0.0035

Mercury -39256-11-11 18:42 J -12616515.85 -12616515.72 -12616515.57 0.0077 0.0028

Mercury -39255-02-07 20:09 J -12616427.80 -12616427.66 -12616427.51 0.0077 0.0020

Mercury -39255-05-06 21:35 J -12616339.74 -12616339.60 -12616339.45 0.0077 0.0012

Mercury -39255-08-02 23:02 J -12616251.69 -12616251.54 -12616251.39 0.0077 0.0005

Mercury -39255-10-30 00:28 J -12616163.63 -12616163.48 -12616163.33 0.0077 0.0003

Mercury -39254-01-26 01:40 J -12616075.57 -12616075.43 -12616075.28 0.0077 0.0011

Mercury -39254-04-24 03:06 J -12615987.51 -12615987.37 -12615987.23 0.0077 0.0018

Mercury -39254-07-21 04:33 J -12615899.45 -12615899.31 -12615899.17 0.0076 0.0025

Mercury -39254-10-17 05:30 J -12615811.39 -12615811.27 -12615811.13 0.0076 0.0032

Mercury -39253-01-13 06:57 J -12615723.33 -12615723.21 -12615723.08 0.0076 0.0039

Mercury -39253-04-10 08:09 J -12615635.27 -12615635.16 -12615635.03 0.0076 0.0046

Mercury -39253-07-07 09:35 J -12615547.20 -12615547.10 -12615546.99 0.0076 0.0053

Mercury -39253-10-03 10:47 J -12615459.13 -12615459.05 -12615458.96 0.0076 0.0060

Mercury -39253-12-30 11:59 J -12615371.06 -12615371.00 -12615370.93 0.0076 0.0067

Mercury -39252-03-28 13:11 J -12615282.97 -12615282.95 -12615282.91 0.0076 0.0074

Mars -39101-04-08 04:33 J -12560119.51 -12560119.31 -12560119.04 0.0064 0.0040

Venus -39097-01-21 13:54 J -12558736.06 -12558735.92 -12558735.74 0.0066 0.0044

Venus -39097-09-02 18:42 J -12558510.94 -12558510.72 -12558510.50 0.0066 0.0001

Venus -39096-04-15 22:47 J -12558285.71 -12558285.55 -12558285.37 0.0066 0.0042

Moon -39096-04-18 11:16 J -12558283.30 -12558283.03 -12558282.76 0.0066 0.0003

Earth -39096-04-18 11:16 J -12558283.28 -12558283.03 -12558282.76 0.0066 0.0003 \*

Mercury -39096-05-24 01:26 J -12558247.50 -12558247.44 -12558247.38 0.0066 0.0062

Mercury -39096-08-20 02:23 J -12558159.47 -12558159.40 -12558159.30 0.0066 0.0057

Mercury -39096-11-16 03:35 J -12558071.44 -12558071.35 -12558071.23 0.0066 0.0051

Mercury -39095-02-12 05:02 J -12557983.40 -12557983.29 -12557983.16 0.0067 0.0046

Mercury -39095-05-11 06:14 J -12557895.36 -12557895.24 -12557895.10 0.0067 0.0041

Mercury -39095-08-07 07:40 J -12557807.32 -12557807.18 -12557807.04 0.0067 0.0035

Mercury -39095-11-03 08:52 J -12557719.28 -12557719.13 -12557718.97 0.0067 0.0030

Mercury -39094-01-30 10:18 J -12557631.23 -12557631.07 -12557630.91 0.0067 0.0024

Mercury -39094-04-28 11:16 J -12557543.18 -12557543.03 -12557542.86 0.0067 0.0019

Mercury -39094-07-25 12:42 J -12557455.13 -12557454.97 -12557454.80 0.0067 0.0014

Mercury -39094-10-21 14:09 J -12557367.08 -12557366.91 -12557366.74 0.0067 0.0008

Mercury -39093-01-17 15:35 J -12557279.02 -12557278.85 -12557278.68 0.0067 0.0002

Mercury -39093-04-14 16:47 J -12557190.96 -12557190.80 -12557190.63 0.0067 0.0004

Mercury -39093-07-11 18:14 J -12557102.91 -12557102.74 -12557102.57 0.0068 0.0009

Mercury -39093-10-07 19:26 J -12557014.85 -12557014.69 -12557014.52 0.0068 0.0016

Mercury -39092-01-03 20:52 J -12556926.79 -12556926.63 -12556926.46 0.0068 0.0021

Mercury -39092-04-01 22:18 J -12556838.72 -12556838.57 -12556838.41 0.0068 0.0027

Mercury -39092-06-28 23:30 J -12556750.66 -12556750.52 -12556750.36 0.0068 0.0033

Mercury -39092-09-25 00:57 J -12556662.59 -12556662.46 -12556662.31 0.0068 0.0039

Mercury -39092-12-22 02:23 J -12556574.52 -12556574.40 -12556574.26 0.0068 0.0045

Mercury -39091-03-20 03:35 J -12556486.44 -12556486.35 -12556486.22 0.0068 0.0052

Mercury -39091-06-16 05:02 J -12556398.36 -12556398.29 -12556398.18 0.0068 0.0058

Mercury -39091-09-12 06:28 J -12556310.27 -12556310.23 -12556310.14 0.0068 0.0064

Venus -39010-02-12 11:45 J -12526937.13 -12526937.01 -12526936.87 0.0079 0.0064

Venus -39010-09-25 22:04 J -12526711.80 -12526711.58 -12526711.36 0.0078 0.0010

Moon -39010-10-21 17:59 J -12526685.95 -12526685.75 -12526685.50 0.0078 0.0044

Earth -39010-10-21 18:57 J -12526685.91 -12526685.71 -12526685.50 0.0078 0.0047 \*

Mercury -39009-01-03 21:35 J -12526611.64 -12526611.60 -12526611.54 0.0078 0.0073

Mercury -39009-03-31 23:02 J -12526523.61 -12526523.54 -12526523.45 0.0078 0.0065

Mercury -39009-06-28 00:42 J -12526435.57 -12526435.47 -12526435.37 0.0078 0.0057

Mercury -39009-09-24 02:09 J -12526347.52 -12526347.41 -12526347.29 0.0078 0.0049

Mercury -39009-12-21 03:21 J -12526259.47 -12526259.36 -12526259.22 0.0077 0.0042

Mercury -39008-03-19 05:02 J -12526171.42 -12526171.29 -12526171.15 0.0077 0.0034

Mercury -39008-06-15 06:14 J -12526083.37 -12526083.24 -12526083.09 0.0077 0.0027

Mercury -39008-09-11 07:54 J -12525995.31 -12525995.17 -12525995.02 0.0077 0.0018

Mercury -39008-12-08 09:21 J -12525907.26 -12525907.11 -12525906.96 0.0077 0.0011

Mercury -39007-03-06 10:47 J -12525819.20 -12525819.05 -12525818.91 0.0077 0.0004

Mercury -39007-06-02 11:59 J -12525731.14 -12525731.00 -12525730.85 0.0077 0.0005

Mercury -39007-08-29 13:26 J -12525643.09 -12525642.94 -12525642.79 0.0077 0.0012

Mercury -39007-11-25 14:38 J -12525555.03 -12525554.89 -12525554.74 0.0076 0.0019

Mercury -39006-02-21 15:50 J -12525466.97 -12525466.84 -12525466.69 0.0076 0.0027

Mercury -39006-05-20 17:16 J -12525378.91 -12525378.78 -12525378.64 0.0076 0.0033

Mercury -39006-08-16 18:42 J -12525290.85 -12525290.72 -12525290.60 0.0076 0.0040

Mercury -39006-11-12 19:40 J -12525202.78 -12525202.68 -12525202.55 0.0076 0.0048

Mercury -39005-02-08 20:52 J -12525114.72 -12525114.63 -12525114.51 0.0076 0.0055

Mercury -39005-05-06 22:04 J -12525026.65 -12525026.58 -12525026.48 0.0076 0.0062

Mercury -39005-08-02 23:16 J -12524938.57 -12524938.53 -12524938.45 0.0076 0.0069

Mercury -39005-10-30 00:57 J -12524850.47 -12524850.46 -12524850.44 0.0075 0.0075

# 39TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 39th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-38850-05-14 04:33 J	-12468406.44	-12468406.31	-12468406.14	0.0066	0.0048		
Venus	-38850-12-25 09:06 J	-12468181.33	-12468181.12	-12468180.89	0.0066	0.0006		
Earth	-38849-04-19 03:50 J	-12468065.50	-12468065.34	-12468065.16	0.0066	0.0049		
Moon	-38849-04-19 04:47 J	-12468065.44	-12468065.30	-12468065.12	0.0066	0.0052 *		
Venus	-38849-08-06 13:26 J	-12467956.11	-12467955.94	-12467955.75	0.0066	0.0037		
Mercury	-38849-12-25 11:02 J	-12467815.05	-12467815.04	-12467814.97	0.0066	0.0065		
Mercury	-38848-03-23 12:42 J	-12467727.04	-12467726.97	-12467726.89	0.0066	0.0059		
Earth	-38848-04-20 18:28 J	-12467698.96	-12467698.73	-12467698.50	0.0066	0.0030		
Moon	-38848-04-20 18:57 J	-12467698.91	-12467698.71	-12467698.47	0.0066	0.0034 *		
Mercury	-38848-06-19 13:54 J	-12467639.01	-12467638.92	-12467638.81	0.0066	0.0054		
Mercury	-38848-09-15 14:52 J	-12467550.97	-12467550.88	-12467550.74	0.0067	0.0049		
Mercury	-38848-12-12 16:33 J	-12467462.93	-12467462.81	-12467462.68	0.0067	0.0043		
Mercury	-38847-03-10 17:30 J	-12467374.89	-12467374.77	-12467374.61	0.0067	0.0038		

Mercury -38847-06-06 18:57 J -12467286.84 -12467286.71 -12467286.55 0.0067 0.0032

Mercury -38847-09-02 20:09 J -12467198.80 -12467198.66 -12467198.49 0.0067 0.0027

Mercury -38847-11-29 21:35 J -12467110.75 -12467110.60 -12467110.43 0.0067 0.0021

Mercury -38846-02-25 23:02 J -12467022.70 -12467022.54 -12467022.37 0.0067 0.0016

Mercury -38846-05-25 00:14 J -12466934.65 -12466934.49 -12466934.31 0.0067 0.0011

Mercury -38846-08-21 01:40 J -12466846.59 -12466846.43 -12466846.25 0.0067 0.0005

Mercury -38846-11-17 03:06 J -12466758.54 -12466758.37 -12466758.20 0.0067 0.0002

Mercury -38845-02-13 04:33 J -12466670.48 -12466670.31 -12466670.14 0.0068 0.0007

Mercury -38845-05-11 05:45 J -12466582.42 -12466582.26 -12466582.09 0.0068 0.0013

Mercury -38845-08-07 07:11 J -12466494.36 -12466494.20 -12466494.03 0.0068 0.0019

Mercury -38845-11-03 08:23 J -12466406.30 -12466406.15 -12466405.98 0.0068 0.0025

Mercury -38844-01-30 09:50 J -12466318.23 -12466318.09 -12466317.93 0.0068 0.0031

Mercury -38844-04-28 11:16 J -12466230.16 -12466230.03 -12466229.88 0.0068 0.0037

Mercury -38844-07-25 12:28 J -12466142.09 -12466141.98 -12466141.83 0.0068 0.0044

Mercury -38844-10-21 13:54 J -12466054.02 -12466053.92 -12466053.78 0.0068 0.0050

Mercury -38843-01-17 15:21 J -12465965.94 -12465965.86 -12465965.74 0.0068 0.0056

Mercury -38843-04-15 16:47 J -12465877.85 -12465877.80 -12465877.71 0.0069 0.0062

Mercury -38843-07-12 18:28 J -12465789.74 -12465789.73 -12465789.70 0.0069 0.0068

Mars -38766-12-31 01:40 J -12437494.76 -12437494.43 -12437494.07 0.0080 0.0013

Venus -38763-06-04 23:45 J -12436607.56 -12436607.51 -12436607.41 0.0079 0.0074

Venus -38762-01-16 10:18 J -12436382.29 -12436382.07 -12436381.84 0.0078 0.0001

Mercury -38762-08-07 08:09 J -12436179.19 -12436179.16 -12436179.09 0.0078 0.0074

Venus -38762-08-29 19:40 J -12436156.72 -12436156.68 -12436156.58 0.0078 0.0074

Earth -38762-10-24 08:23 J -12436101.40 -12436101.15 -12436100.89 0.0078 0.0013

Moon -38762-10-24 09:06 J -12436101.37 -12436101.12 -12436100.87 0.0078 0.0012 \*

Mercury -38762-11-03 09:50 J -12436091.16 -12436091.09 -12436091.00 0.0078 0.0066

Mercury -38761-01-30 11:16 J -12436003.11 -12436003.03 -12436002.92 0.0078 0.0058

Mercury -38761-04-27 12:57 J -12435915.07 -12435914.96 -12435914.84 0.0078 0.0050

Mercury -38761-07-24 14:09 J -12435827.02 -12435826.91 -12435826.77 0.0077 0.0043

Mercury -38761-10-20 15:50 J -12435738.97 -12435738.84 -12435738.70 0.0077 0.0034



Mercury -38760-01-16 17:16 J -12435650.92 -12435650.78 -12435650.64 0.0077 0.0026

Mercury -38760-04-14 18:42 J -12435562.86 -12435562.72 -12435562.57 0.0077 0.0019

Mercury -38760-07-11 20:09 J -12435474.81 -12435474.66 -12435474.51 0.0077 0.0011

Mercury -38760-10-07 21:35 J -12435386.75 -12435386.60 -12435386.45 0.0077 0.0004

Mercury -38759-01-03 22:47 J -12435298.69 -12435298.55 -12435298.40 0.0077 0.0004

Mercury -38759-04-02 00:14 J -12435210.64 -12435210.49 -12435210.34 0.0076 0.0011

Mercury -38759-06-29 01:26 J -12435122.58 -12435122.44 -12435122.29 0.0076 0.0019

Mercury -38759-09-25 02:52 J -12435034.52 -12435034.38 -12435034.24 0.0076 0.0025

Mercury -38759-12-22 03:50 J -12434946.46 -12434946.34 -12434946.19 0.0076 0.0033

Mercury -38758-03-20 05:16 J -12434858.39 -12434858.28 -12434858.14 0.0076 0.0040

Mercury -38758-06-16 06:28 J -12434770.33 -12434770.23 -12434770.10 0.0076 0.0047

Mercury -38758-09-12 07:40 J -12434682.27 -12434682.18 -12434682.06 0.0076 0.0054

Mercury -38758-12-09 08:52 J -12434594.20 -12434594.13 -12434594.03 0.0076 0.0061

Mercury -38757-03-06 10:04 J -12434506.12 -12434506.08 -12434506.00 0.0075 0.0068

Mercury -38757-06-02 11:16 J -12434418.03 -12434418.03 -12434417.98 0.0075 0.0075

Mars -38607-12-07 05:30 J -12379443.56 -12379443.27 -12379442.98 0.0064 0.0010

Venus -38603-09-03 18:14 J -12378076.85 -12378076.74 -12378076.62 0.0066 0.0056

Venus -38602-04-16 22:33 J -12377851.77 -12377851.56 -12377851.35 0.0066 0.0014

Venus -38602-11-28 02:52 J -12377626.58 -12377626.38 -12377626.18 0.0066 0.0028

Moon -38601-04-21 07:54 J -12377481.41 -12377481.17 -12377480.94 0.0066 0.0025

Earth -38601-04-21 08:09 J -12377481.39 -12377481.16 -12377480.90 0.0066 0.0022 \*

Mercury -38601-10-24 22:04 J -12377294.62 -12377294.58 -12377294.50 0.0066 0.0062

Mercury -38600-01-20 23:30 J -12377206.59 -12377206.52 -12377206.42 0.0066 0.0057

Mercury -38600-04-19 00:42 J -12377118.56 -12377118.47 -12377118.35 0.0067 0.0052

Moon -38600-04-22 21:06 J -12377114.69 -12377114.62 -12377114.47 0.0067 0.0061

Earth -38600-04-22 23:02 J -12377114.67 -12377114.54 -12377114.42 0.0067 0.0058 \*

Mercury -38600-07-16 01:54 J -12377030.52 -12377030.42 -12377030.28 0.0067 0.0047

Mercury -38600-10-12 03:21 J -12376942.48 -12376942.36 -12376942.22 0.0067 0.0041

Mercury -38599-01-08 04:33 J -12376854.44 -12376854.31 -12376854.16 0.0067 0.0036

Mercury -38599-04-06 05:59 J -12376766.39 -12376766.25 -12376766.09 0.0067 0.0030

Mercury -38599-07-03 07:26 J -12376678.35 -12376678.19 -12376678.03 0.0067 0.0024

Mercury -38599-09-29 08:38 J -12376590.30 -12376590.14 -12376589.97 0.0067 0.0019

Mercury -38599-12-26 10:04 J -12376502.24 -12376502.08 -12376501.91 0.0067 0.0013

Mercury -38598-03-24 11:30 J -12376414.19 -12376414.02 -12376413.86 0.0067 0.0008

Mercury -38598-06-20 12:42 J -12376326.14 -12376325.97 -12376325.80 0.0067 0.0002

Mercury -38598-09-16 14:09 J -12376238.08 -12376237.91 -12376237.74 0.0068 0.0004

Mercury -38598-12-13 15:21 J -12376150.02 -12376149.86 -12376149.69 0.0068 0.0010

Mercury -38597-03-10 16:47 J -12376061.96 -12376061.80 -12376061.63 0.0068 0.0016

Mercury -38597-06-06 17:59 J -12375973.90 -12375973.75 -12375973.58 0.0068 0.0022

Mercury -38597-09-02 19:40 J -12375885.84 -12375885.68 -12375885.53 0.0068 0.0027

Mercury -38597-11-29 20:52 J -12375797.77 -12375797.63 -12375797.47 0.0068 0.0034

Mercury -38596-02-25 22:18 J -12375709.70 -12375709.57 -12375709.42 0.0068 0.0040

Mercury -38596-05-24 23:45 J -12375621.63 -12375621.51 -12375621.38 0.0068 0.0046

Mercury -38596-08-21 01:11 J -12375533.55 -12375533.45 -12375533.33 0.0068 0.0052

Mercury -38596-11-17 02:52 J -12375445.47 -12375445.38 -12375445.29 0.0069 0.0058

Mercury -38595-02-13 03:50 J -12375357.38 -12375357.34 -12375357.26 0.0069 0.0065

Venus -38515-05-08 19:26 J -12346052.89 -12346052.69 -12346052.46 0.0078 0.0023

Moon -38515-10-24 13:40 J -12345884.02 -12345883.93 -12345883.79 0.0078 0.0069

Earth -38515-10-24 14:23 J -12345883.98 -12345883.90 -12345883.79 0.0078 0.0073 \*

Venus -38515-12-20 05:30 J -12345827.43 -12345827.27 -12345827.09 0.0078 0.0051

Mercury -38514-06-06 19:54 J -12345658.73 -12345658.67 -12345658.60 0.0078 0.0070

Mercury -38514-09-02 21:21 J -12345570.69 -12345570.61 -12345570.52 0.0078 0.0062

Moon -38514-10-26 15:50 J -12345517.01 -12345516.84 -12345516.62 0.0078 0.0054

Earth -38514-10-26 16:33 J -12345516.95 -12345516.81 -12345516.61 0.0078 0.0058 \*

Mercury -38514-11-29 22:33 J -12345482.65 -12345482.56 -12345482.44 0.0077 0.0055

Mercury -38513-02-26 00:14 J -12345394.60 -12345394.49 -12345394.37 0.0077 0.0046

Mercury -38513-05-24 01:40 J -12345306.55 -12345306.43 -12345306.30 0.0077 0.0039

Mercury -38513-08-20 03:06 J -12345218.50 -12345218.37 -12345218.23 0.0077 0.0031

Mercury -38513-11-16 04:33 J -12345130.45 -12345130.31 -12345130.16 0.0077 0.0023

Mercury -38512-02-12 05:59 J -12345042.39 -12345042.25 -12345042.10 0.0077 0.0016

Mercury -38512-05-11 07:26 J -12344954.34 -12344954.19 -12344954.04 0.0077 0.0008

Mercury -38512-08-07 08:52 J -12344866.28 -12344866.13 -12344865.99 0.0077 0.0002

Mercury -38512-11-03 10:04 J -12344778.23 -12344778.08 -12344777.93 0.0076 0.0007

Mercury -38511-01-30 11:16 J -12344690.17 -12344690.03 -12344689.88 0.0076 0.0015

Mercury -38511-04-28 12:42 J -12344602.11 -12344601.97 -12344601.82 0.0076 0.0021

Mercury -38511-07-25 14:09 J -12344514.05 -12344513.91 -12344513.77 0.0076 0.0028

Mercury -38511-10-21 15:21 J -12344425.99 -12344425.86 -12344425.73 0.0076 0.0035

Mercury -38510-01-17 16:18 J -12344337.92 -12344337.82 -12344337.68 0.0076 0.0043

Mercury -38510-04-15 17:45 J -12344249.86 -12344249.76 -12344249.64 0.0076 0.0050

Mercury -38510-07-12 18:57 J -12344161.79 -12344161.71 -12344161.60 0.0076 0.0056

Mercury -38510-10-08 20:09 J -12344073.72 -12344073.66 -12344073.57 0.0075 0.0063

Mercury -38509-01-04 21:35 J -12343985.65 -12343985.60 -12343985.54 0.0075 0.0070

Mars -38358-03-18 04:18 J -12288760.49 -12288760.32 -12288760.13 0.0064 0.0051

Venus -38355-08-07 08:52 J -12287522.31 -12287522.13 -12287521.93 0.0066 0.0033

Venus -38354-03-20 13:11 J -12287297.16 -12287296.95 -12287296.73 0.0066 0.0010

Venus -38354-10-31 17:16 J -12287071.89 -12287071.78 -12287071.63 0.0066 0.0053

Earth -38353-04-23 08:09 J -12286897.42 -12286897.16 -12286896.90 0.0066 0.0006

Moon -38353-04-23 08:23 J -12286897.41 -12286897.15 -12286896.88 0.0066 0.0006 \*

Mercury -38353-08-24 07:54 J -12286774.20 -12286774.17 -12286774.11 0.0066 0.0064

Mercury -38353-11-20 08:52 J -12286686.18 -12286686.13 -12286686.03 0.0067 0.0059

Mercury -38352-02-16 10:33 J -12286598.15 -12286598.06 -12286597.95 0.0067 0.0053

Mercury -38352-05-15 11:45 J -12286510.12 -12286510.01 -12286509.88 0.0067 0.0048

Mercury -38352-08-11 13:11 J -12286422.08 -12286421.95 -12286421.82 0.0067 0.0042

Mercury -38352-11-07 14:09 J -12286334.03 -12286333.91 -12286333.75 0.0067 0.0037

Mercury -38351-02-03 15:50 J -12286245.99 -12286245.84 -12286245.69 0.0067 0.0031

Mercury -38351-05-02 16:47 J -12286157.94 -12286157.80 -12286157.63 0.0067 0.0027

Mercury -38351-07-29 18:14 J -12286069.89 -12286069.74 -12286069.57 0.0067 0.0021

Mercury -38351-10-25 19:54 J -12285981.84 -12285981.67 -12285981.51 0.0067 0.0015

Mercury -38350-01-21 21:06 J -12285893.79 -12285893.62 -12285893.45 0.0067 0.0009

Mercury -38350-04-19 22:33 J -12285805.73 -12285805.56 -12285805.39 0.0068 0.0003

Mercury -38350-07-16 23:45 J -12285717.67 -12285717.51 -12285717.34 0.0068 0.0003

Mercury -38350-10-13 01:11 J -12285629.62 -12285629.45 -12285629.28 0.0068 0.0008

Mercury -38349-01-09 02:38 J -12285541.56 -12285541.39 -12285541.22 0.0068 0.0014

Mercury -38349-04-06 03:50 J -12285453.49 -12285453.34 -12285453.17 0.0068 0.0020

Mercury -38349-07-03 05:16 J -12285365.43 -12285365.28 -12285365.12 0.0068 0.0026

Mercury -38349-09-29 06:28 J -12285277.36 -12285277.23 -12285277.06 0.0068 0.0033

Mercury -38349-12-26 07:54 J -12285189.30 -12285189.17 -12285189.01 0.0068 0.0039

Mercury -38348-03-24 09:21 J -12285101.22 -12285101.11 -12285100.97 0.0068 0.0045

Mercury -38348-06-20 10:47 J -12285013.15 -12285013.05 -12285012.92 0.0069 0.0051

Mercury -38348-09-16 12:14 J -12284925.07 -12284924.99 -12284924.88 0.0069 0.0057

Mercury -38348-12-13 13:54 J -12284836.98 -12284836.92 -12284836.85 0.0069 0.0063

Venus -38268-08-29 02:09 J -12255723.54 -12255723.41 -12255723.23 0.0079 0.0057

Venus -38267-04-11 12:42 J -12255498.19 -12255497.97 -12255497.75 0.0078 0.0018

Earth -38267-10-26 19:26 J -12255299.91 -12255299.69 -12255299.47 0.0078 0.0039

Moon -38267-10-26 19:26 J -12255299.90 -12255299.69 -12255299.43 0.0078 0.0037 \*

Mercury -38266-01-08 04:47 J -12255226.30 -12255226.30 -12255226.29 0.0078 0.0078

Mercury -38266-04-06 05:59 J -12255138.30 -12255138.25 -12255138.17 0.0078 0.0070

Mercury -38266-07-03 07:40 J -12255050.26 -12255050.18 -12255050.08 0.0078 0.0062

Mercury -38266-09-29 09:06 J -12254962.22 -12254962.12 -12254962.00 0.0077 0.0054

Mercury -38266-12-26 10:33 J -12254874.17 -12254874.06 -12254873.93 0.0077 0.0046

Mercury -38265-03-23 11:59 J -12254786.12 -12254786.00 -12254785.86 0.0077 0.0038

Mercury -38265-06-19 13:40 J -12254698.07 -12254697.93 -12254697.79 0.0077 0.0030

Mercury -38265-09-15 14:52 J -12254610.02 -12254609.88 -12254609.73 0.0077 0.0023

Mercury -38265-12-12 16:18 J -12254521.96 -12254521.82 -12254521.67 0.0077 0.0015

Mercury -38264-03-10 17:45 J -12254433.91 -12254433.76 -12254433.61 0.0077 0.0008

Mercury -38264-06-06 19:11 J -12254345.85 -12254345.70 -12254345.55 0.0076 0.0001

Mercury -38264-09-02 20:23 J -12254257.79 -12254257.65 -12254257.50 0.0076 0.0007

Mercury -38264-11-29 21:50 J -12254169.74 -12254169.59 -12254169.44 0.0076 0.0014

Mercury -38263-02-25 23:02 J -12254081.68 -12254081.54 -12254081.39 0.0076 0.0022

Mercury -38263-05-25 00:14 J -12253993.62 -12253993.49 -12253993.34 0.0076 0.0029

Mercury -38263-08-21 01:40 J -12253905.56 -12253905.43 -12253905.30 0.0076 0.0036  
 Mercury -38263-11-17 02:52 J -12253817.49 -12253817.38 -12253817.25 0.0076 0.0043  
 Mercury -38262-02-13 04:04 J -12253729.43 -12253729.33 -12253729.21 0.0076 0.0050  
 Mercury -38262-05-12 05:16 J -12253641.36 -12253641.28 -12253641.17 0.0075 0.0057  
 Mercury -38262-08-08 06:28 J -12253553.29 -12253553.23 -12253553.14 0.0075 0.0064  
 Mercury -38262-11-04 07:40 J -12253465.21 -12253465.18 -12253465.11 0.0075 0.0070  
 Venus -38108-11-27 17:45 J -12197192.84 -12197192.76 -12197192.63 0.0065 0.0057  
 Venus -38107-07-10 22:18 J -12196967.77 -12196967.57 -12196967.35 0.0066 0.0015  
 Venus -38106-02-21 02:38 J -12196742.57 -12196742.39 -12196742.18 0.0066 0.0028  
 Earth -38105-04-25 05:16 J -12196313.54 -12196313.28 -12196313.02 0.0066 0.0004  
 Moon -38105-04-25 05:59 J -12196313.50 -12196313.25 -12196313.00 0.0066 0.0007 \*  
 Mercury -38105-09-19 17:59 J -12196165.79 -12196165.75 -12196165.67 0.0067 0.0062  
 Mercury -38105-12-16 19:40 J -12196077.77 -12196077.68 -12196077.59 0.0067 0.0056  
 Mercury -38104-03-14 20:38 J -12195989.73 -12195989.64 -12195989.52 0.0067 0.0051  
 Mercury -38104-06-10 21:50 J -12195901.69 -12195901.59 -12195901.45 0.0067 0.0046  
 Mercury -38104-09-06 23:16 J -12195813.65 -12195813.53 -12195813.38 0.0067 0.0040  
 Mercury -38104-12-04 00:28 J -12195725.61 -12195725.48 -12195725.32 0.0067 0.0035  
 Mercury -38103-03-02 01:54 J -12195637.56 -12195637.42 -12195637.26 0.0067 0.0029  
 Mercury -38103-05-29 03:21 J -12195549.51 -12195549.36 -12195549.20 0.0067 0.0024  
 Mercury -38103-08-25 04:47 J -12195461.46 -12195461.30 -12195461.14 0.0067 0.0018  
 Mercury -38103-11-21 05:59 J -12195373.41 -12195373.25 -12195373.08 0.0067 0.0012  
 Mercury -38102-02-17 07:26 J -12195285.36 -12195285.19 -12195285.02 0.0068 0.0007  
 Mercury -38102-05-16 08:52 J -12195197.30 -12195197.13 -12195196.96 0.0068 0.0001  
 Mercury -38102-08-12 10:04 J -12195109.24 -12195109.08 -12195108.91 0.0068 0.0006  
 Mercury -38102-11-08 11:30 J -12195021.18 -12195021.02 -12195020.85 0.0068 0.0011  
 Mercury -38101-02-04 12:57 J -12194933.12 -12194932.96 -12194932.79 0.0068 0.0017  
 Mercury -38101-05-02 14:09 J -12194845.06 -12194844.91 -12194844.74 0.0068 0.0023  
 Mercury -38101-07-29 15:35 J -12194756.99 -12194756.85 -12194756.69 0.0068 0.0029  
 Mercury -38101-10-25 16:47 J -12194668.93 -12194668.80 -12194668.64 0.0068 0.0036  
 Mercury -38100-01-21 18:14 J -12194580.86 -12194580.74 -12194580.59 0.0068 0.0042

Mercury -38100-04-19 19:40 J -12194492.78 -12194492.68 -12194492.54 0.0069 0.0048

Mercury -38100-07-16 21:06 J -12194404.71 -12194404.62 -12194404.50 0.0069 0.0054

Mercury -38100-10-12 22:47 J -12194316.62 -12194316.55 -12194316.46 0.0069 0.0060

Mercury -38099-01-09 00:28 J -12194228.52 -12194228.48 -12194228.43 0.0069 0.0066

Mars -38023-12-05 07:54 J -12166139.47 -12166139.17 -12166138.87 0.0080 0.0037

Venus -38020-08-01 15:21 J -12165169.04 -12165168.86 -12165168.64 0.0078 0.0033

Venus -38019-03-15 01:40 J -12164943.61 -12164943.43 -12164943.23 0.0078 0.0042

Earth -38019-10-28 17:45 J -12164715.99 -12164715.76 -12164715.49 0.0078 0.0024

Moon -38019-10-28 18:28 J -12164715.95 -12164715.73 -12164715.48 0.0078 0.0026 \*

Mercury -38018-02-03 15:21 J -12164617.89 -12164617.86 -12164617.80 0.0078 0.0074

Mercury -38018-05-02 16:47 J -12164529.86 -12164529.80 -12164529.71 0.0077 0.0066

Mercury -38018-07-29 18:28 J -12164441.82 -12164441.73 -12164441.63 0.0077 0.0058

Mercury -38018-10-25 19:54 J -12164353.78 -12164353.67 -12164353.55 0.0077 0.0050

Mercury -38017-01-21 21:06 J -12164265.73 -12164265.62 -12164265.48 0.0077 0.0042

Mercury -38017-04-18 22:47 J -12164177.68 -12164177.55 -12164177.41 0.0077 0.0034

Mercury -38017-07-15 23:59 J -12164089.63 -12164089.50 -12164089.35 0.0077 0.0027

Mercury -38017-10-12 01:40 J -12164001.57 -12164001.43 -12164001.29 0.0077 0.0019

Mercury -38016-01-08 02:52 J -12163913.52 -12163913.38 -12163913.23 0.0077 0.0012

Mercury -38016-04-06 04:18 J -12163825.46 -12163825.32 -12163825.17 0.0076 0.0004

Mercury -38016-07-03 05:45 J -12163737.41 -12163737.26 -12163737.11 0.0076 0.0003

Mercury -38016-09-29 06:57 J -12163649.35 -12163649.21 -12163649.06 0.0076 0.0011

Mercury -38016-12-26 08:23 J -12163561.29 -12163561.15 -12163561.00 0.0076 0.0018

Mercury -38015-03-24 09:35 J -12163473.23 -12163473.10 -12163472.95 0.0076 0.0025

Mercury -38015-06-20 11:02 J -12163385.17 -12163385.04 -12163384.91 0.0076 0.0032

Mercury -38015-09-16 12:14 J -12163297.11 -12163296.99 -12163296.86 0.0076 0.0039

Mercury -38015-12-13 13:40 J -12163209.05 -12163208.93 -12163208.82 0.0075 0.0046

Mercury -38014-03-11 14:52 J -12163120.98 -12163120.88 -12163120.78 0.0075 0.0053

Mercury -38014-06-07 16:04 J -12163032.92 -12163032.83 -12163032.74 0.0075 0.0060

Mercury -38014-09-03 17:02 J -12162944.84 -12162944.79 -12162944.71 0.0075 0.0067

Mercury -38014-11-30 18:14 J -12162856.76 -12162856.74 -12162856.69 0.0075 0.0073

# 38TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 38th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-37860-10-31 05:16 J		-12106638.42	-12106638.28	-12106638.12	0.0065	0.0047	
Venus	-37859-06-13 09:35 J		-12106413.32	-12106413.10	-12106412.88	0.0066	0.0005	
Venus	-37858-01-24 13:54 J		-12106188.09	-12106187.92	-12106187.74	0.0066	0.0037	
Moon	-37857-04-26 21:35 J		-12105729.87	-12105729.60	-12105729.34	0.0066	0.0005	
Earth	-37857-04-26 22:33 J		-12105729.82	-12105729.56	-12105729.30	0.0066	0.0003	*
Mercury	-37857-10-16 03:35 J		-12105557.40	-12105557.35	-12105557.29	0.0067	0.0062	
Mercury	-37856-01-12 04:33 J		-12105469.38	-12105469.31	-12105469.21	0.0067	0.0057	
Mercury	-37856-04-10 06:14 J		-12105381.35	-12105381.24	-12105381.13	0.0067	0.0051	
Mercury	-37856-07-07 07:11 J		-12105293.31	-12105293.20	-12105293.07	0.0067	0.0046	
Mercury	-37856-10-03 08:52 J		-12105205.27	-12105205.13	-12105205.00	0.0067	0.0040	
Mercury	-37856-12-30 09:50 J		-12105117.22	-12105117.09	-12105116.94	0.0067	0.0035	
Mercury	-37855-03-28 11:16 J		-12105029.18	-12105029.03	-12105028.87	0.0067	0.0029	
Mercury	-37855-06-24 12:28 J		-12104941.13	-12104940.98	-12104940.81	0.0067	0.0024	
Mercury	-37855-09-20 13:54 J		-12104853.08	-12104852.92	-12104852.75	0.0067	0.0018	
Mercury	-37855-12-17 15:21 J		-12104765.02	-12104764.86	-12104764.69	0.0068	0.0013	
Mercury	-37854-03-15 16:47 J		-12104676.97	-12104676.80	-12104676.63	0.0068	0.0007	
Mercury	-37854-06-11 18:14 J		-12104588.91	-12104588.74	-12104588.58	0.0068	0.0002	
Mercury	-37854-09-07 19:26 J		-12104500.86	-12104500.69	-12104500.52	0.0068	0.0005	

Mercury -37854-12-04 20:52 J -12104412.80 -12104412.63 -12104412.46 0.0068 0.0011

Mercury -37853-03-01 22:04 J -12104324.74 -12104324.58 -12104324.41 0.0068 0.0017

Mercury -37853-05-28 23:30 J -12104236.67 -12104236.52 -12104236.35 0.0068 0.0023

Mercury -37853-08-25 01:11 J -12104148.61 -12104148.45 -12104148.30 0.0068 0.0029

Mercury -37853-11-21 02:38 J -12104060.54 -12104060.39 -12104060.25 0.0068 0.0035

Mercury -37852-02-17 04:04 J -12103972.47 -12103972.33 -12103972.20 0.0068 0.0041

Mercury -37852-05-16 05:02 J -12103884.39 -12103884.29 -12103884.15 0.0069 0.0048

Mercury -37852-08-12 06:28 J -12103796.32 -12103796.23 -12103796.10 0.0069 0.0054

Mercury -37852-11-08 07:54 J -12103708.23 -12103708.17 -12103708.07 0.0069 0.0060

Mercury -37851-02-04 09:35 J -12103620.13 -12103620.10 -12103620.04 0.0069 0.0066

Mars -37774-03-15 21:21 J -12075456.80 -12075456.61 -12075456.33 0.0080 0.0059

Venus -37772-07-05 03:06 J -12074614.59 -12074614.37 -12074614.15 0.0078 0.0017

Venus -37771-02-15 12:28 J -12074389.11 -12074388.98 -12074388.80 0.0078 0.0057

Moon -37771-10-30 12:42 J -12074132.21 -12074131.97 -12074131.69 0.0078 0.0021

Earth -37771-10-30 13:54 J -12074132.16 -12074131.92 -12074131.66 0.0078 0.0017 \*

Mercury -37770-03-02 01:40 J -12074009.48 -12074009.43 -12074009.37 0.0078 0.0072

Mercury -37770-05-29 03:06 J -12073921.45 -12073921.37 -12073921.28 0.0077 0.0064

Mercury -37770-08-25 04:18 J -12073833.41 -12073833.32 -12073833.20 0.0077 0.0056

Mercury -37770-11-21 05:45 J -12073745.36 -12073745.26 -12073745.13 0.0077 0.0049

Mercury -37769-02-17 07:26 J -12073657.31 -12073657.19 -12073657.06 0.0077 0.0040

Mercury -37769-05-15 08:38 J -12073569.26 -12073569.14 -12073568.99 0.0077 0.0033

Mercury -37769-08-11 10:18 J -12073481.21 -12073481.07 -12073480.93 0.0077 0.0025

Mercury -37769-11-07 11:30 J -12073393.16 -12073393.02 -12073392.87 0.0077 0.0018

Mercury -37768-02-03 12:57 J -12073305.10 -12073304.96 -12073304.81 0.0076 0.0010

Mercury -37768-05-02 14:23 J -12073217.05 -12073216.90 -12073216.75 0.0076 0.0003

Mercury -37768-07-29 15:50 J -12073128.99 -12073128.84 -12073128.69 0.0076 0.0005

Mercury -37768-10-25 17:02 J -12073040.93 -12073040.79 -12073040.64 0.0076 0.0012

Mercury -37767-01-21 18:28 J -12072952.88 -12072952.73 -12072952.59 0.0076 0.0019

Mercury -37767-04-19 19:26 J -12072864.82 -12072864.69 -12072864.54 0.0076 0.0027

Mercury -37767-07-16 20:52 J -12072776.76 -12072776.63 -12072776.49 0.0076 0.0033



Mercury -37767-10-12 22:04 J -12072688.70 -12072688.58 -12072688.45 0.0076 0.0041  
 Mercury -37766-01-08 23:16 J -12072600.63 -12072600.53 -12072600.40 0.0075 0.0048  
 Mercury -37766-04-07 00:28 J -12072512.57 -12072512.48 -12072512.36 0.0075 0.0055  
 Mercury -37766-07-04 01:40 J -12072424.50 -12072424.43 -12072424.33 0.0075 0.0061  
 Mercury -37766-09-30 02:52 J -12072336.42 -12072336.38 -12072336.30 0.0075 0.0068  
 Mercury -37766-12-27 04:18 J -12072248.33 -12072248.32 -12072248.30 0.0075 0.0074  
 Mars -37615-02-22 03:50 J -12017403.54 -12017403.34 -12017403.08 0.0064 0.0040  
 Venus -37612-10-03 14:52 J -12016084.02 -12016083.88 -12016083.69 0.0065 0.0043  
 Venus -37611-05-16 19:40 J -12015858.90 -12015858.68 -12015858.46 0.0066 0.0000  
 Venus -37611-12-27 23:30 J -12015633.67 -12015633.52 -12015633.34 0.0066 0.0042  
 Earth -37609-04-28 13:40 J -12015146.19 -12015145.93 -12015145.67 0.0066 0.0002  
 Moon -37609-04-28 15:50 J -12015146.09 -12015145.84 -12015145.58 0.0066 0.0005 \*  
 Mercury -37609-11-11 12:28 J -12014949.02 -12014948.98 -12014948.94 0.0067 0.0064  
 Mercury -37608-02-07 13:26 J -12014861.01 -12014860.94 -12014860.85 0.0067 0.0059  
 Mercury -37608-05-06 14:23 J -12014772.98 -12014772.90 -12014772.78 0.0067 0.0054  
 Mercury -37608-08-02 15:50 J -12014684.94 -12014684.84 -12014684.71 0.0067 0.0048  
 Mercury -37608-10-29 17:02 J -12014596.90 -12014596.79 -12014596.64 0.0067 0.0043  
 Mercury -37607-01-25 18:28 J -12014508.86 -12014508.73 -12014508.58 0.0067 0.0037  
 Mercury -37607-04-23 19:54 J -12014420.81 -12014420.67 -12014420.51 0.0067 0.0032  
 Mercury -37607-07-20 21:06 J -12014332.76 -12014332.62 -12014332.45 0.0067 0.0026  
 Mercury -37607-10-16 22:33 J -12014244.71 -12014244.56 -12014244.39 0.0067 0.0021  
 Mercury -37606-01-12 23:59 J -12014156.66 -12014156.50 -12014156.33 0.0068 0.0015  
 Mercury -37606-04-11 01:26 J -12014068.61 -12014068.44 -12014068.27 0.0068 0.0009  
 Mercury -37606-07-08 02:38 J -12013980.55 -12013980.39 -12013980.21 0.0068 0.0004  
 Mercury -37606-10-04 04:04 J -12013892.50 -12013892.33 -12013892.16 0.0068 0.0003  
 Mercury -37606-12-31 05:30 J -12013804.44 -12013804.27 -12013804.10 0.0068 0.0009  
 Mercury -37605-03-28 06:42 J -12013716.38 -12013716.22 -12013716.04 0.0068 0.0015  
 Mercury -37605-06-24 08:23 J -12013628.31 -12013628.15 -12013627.99 0.0068 0.0021  
 Mercury -37605-09-20 09:50 J -12013540.25 -12013540.09 -12013539.94 0.0068 0.0027  
 Mercury -37605-12-17 11:16 J -12013452.18 -12013452.03 -12013451.88 0.0068 0.0033

Mercury -37604-03-15 12:42 J -12013364.11 -12013363.97 -12013363.83 0.0069 0.0039

Mercury -37604-06-11 13:40 J -12013276.04 -12013275.93 -12013275.78 0.0069 0.0046

Mercury -37604-09-07 15:06 J -12013187.96 -12013187.87 -12013187.74 0.0069 0.0052

Mercury -37604-12-04 16:47 J -12013099.88 -12013099.80 -12013099.70 0.0069 0.0058

Mercury -37603-03-02 18:14 J -12013011.79 -12013011.74 -12013011.67 0.0069 0.0064

Venus -37524-06-07 10:33 J -11984060.28 -11984060.06 -11984059.84 0.0078 0.0017

Venus -37523-01-18 20:09 J -11983834.79 -11983834.66 -11983834.49 0.0078 0.0057

Earth -37523-11-01 03:50 J -11983548.57 -11983548.34 -11983548.09 0.0078 0.0027

Moon -37523-11-01 05:45 J -11983548.48 -11983548.26 -11983548.01 0.0078 0.0027 \*

Mercury -37522-03-28 10:18 J -11983401.10 -11983401.07 -11983401.02 0.0077 0.0075

Mercury -37522-06-24 11:45 J -11983313.07 -11983313.01 -11983312.92 0.0077 0.0067

Mercury -37522-09-20 13:26 J -11983225.03 -11983224.94 -11983224.84 0.0077 0.0058

Mercury -37522-12-17 14:52 J -11983136.99 -11983136.88 -11983136.76 0.0077 0.0050

Mercury -37521-03-14 16:04 J -11983048.94 -11983048.83 -11983048.69 0.0077 0.0043

Mercury -37521-06-10 17:45 J -11982960.89 -11982960.76 -11982960.63 0.0077 0.0035

Mercury -37521-09-06 18:57 J -11982872.84 -11982872.71 -11982872.56 0.0077 0.0028

Mercury -37521-12-03 20:38 J -11982784.79 -11982784.64 -11982784.50 0.0077 0.0020

Mercury -37520-03-01 21:50 J -11982696.73 -11982696.59 -11982696.44 0.0076 0.0012

Mercury -37520-05-28 23:16 J -11982608.68 -11982608.53 -11982608.38 0.0076 0.0005

Mercury -37520-08-25 00:42 J -11982520.62 -11982520.47 -11982520.33 0.0076 0.0003

Mercury -37520-11-21 01:54 J -11982432.57 -11982432.42 -11982432.27 0.0076 0.0010

Mercury -37519-02-17 03:06 J -11982344.51 -11982344.37 -11982344.22 0.0076 0.0017

Mercury -37519-05-16 04:33 J -11982256.45 -11982256.31 -11982256.17 0.0076 0.0024

Mercury -37519-08-12 05:30 J -11982168.39 -11982168.27 -11982168.12 0.0076 0.0032

Mercury -37519-11-08 06:57 J -11982080.33 -11982080.21 -11982080.07 0.0075 0.0038

Mercury -37518-02-04 08:09 J -11981992.27 -11981992.16 -11981992.03 0.0075 0.0045

Mercury -37518-05-03 09:21 J -11981904.20 -11981904.11 -11981903.99 0.0075 0.0052

Mercury -37518-07-30 10:33 J -11981816.14 -11981816.06 -11981815.95 0.0075 0.0059

Mercury -37518-10-26 11:59 J -11981728.06 -11981728.00 -11981727.92 0.0075 0.0065

Mercury -37517-01-22 13:11 J -11981639.98 -11981639.95 -11981639.91 0.0075 0.0072

Mars -37367-06-02 09:06 J -11926721.38 -11926721.12 -11926720.82 0.0064 0.0021  
 Venus -37364-09-05 23:16 J -11925529.67 -11925529.53 -11925529.34 0.0065 0.0043  
 Venus -37363-04-19 03:50 J -11925304.56 -11925304.34 -11925304.12 0.0066 0.0002  
 Venus -37363-11-30 07:40 J -11925079.33 -11925079.18 -11925078.99 0.0066 0.0041  
 Moon -37361-04-29 22:47 J -11924562.79 -11924562.55 -11924562.27 0.0066 0.0018  
 Earth -37361-04-30 01:40 J -11924562.68 -11924562.43 -11924562.17 0.0066 0.0015 \*  
 Mercury -37360-03-05 21:06 J -11924252.65 -11924252.62 -11924252.54 0.0067 0.0063  
 Mercury -37360-06-01 22:47 J -11924164.63 -11924164.55 -11924164.46 0.0067 0.0057  
 Mercury -37360-08-28 23:45 J -11924076.60 -11924076.51 -11924076.39 0.0067 0.0052  
 Mercury -37360-11-25 01:26 J -11923988.56 -11923988.44 -11923988.32 0.0067 0.0046  
 Mercury -37359-02-21 02:23 J -11923900.52 -11923900.40 -11923900.26 0.0067 0.0041  
 Mercury -37359-05-20 03:50 J -11923812.47 -11923812.34 -11923812.19 0.0067 0.0036  
 Mercury -37359-08-16 05:02 J -11923724.43 -11923724.29 -11923724.13 0.0067 0.0030  
 Mercury -37359-11-12 06:28 J -11923636.38 -11923636.23 -11923636.07 0.0067 0.0024  
 Mercury -37358-02-08 07:54 J -11923548.33 -11923548.17 -11923548.01 0.0068 0.0019  
 Mercury -37358-05-07 09:21 J -11923460.28 -11923460.11 -11923459.95 0.0068 0.0013  
 Mercury -37358-08-03 10:47 J -11923372.22 -11923372.05 -11923371.89 0.0068 0.0007  
 Mercury -37358-10-30 11:59 J -11923284.17 -11923284.00 -11923283.83 0.0068 0.0002  
 Mercury -37357-01-26 13:26 J -11923196.11 -11923195.94 -11923195.77 0.0068 0.0005  
 Mercury -37357-04-23 14:38 J -11923108.05 -11923107.89 -11923107.71 0.0068 0.0011  
 Mercury -37357-07-20 16:18 J -11923019.99 -11923019.82 -11923019.66 0.0068 0.0017  
 Mercury -37357-10-16 17:45 J -11922931.92 -11922931.76 -11922931.60 0.0068 0.0023  
 Mercury -37356-01-12 18:57 J -11922843.86 -11922843.71 -11922843.55 0.0068 0.0029  
 Mercury -37356-04-10 20:38 J -11922755.79 -11922755.64 -11922755.50 0.0069 0.0035  
 Mercury -37356-07-07 21:35 J -11922667.72 -11922667.60 -11922667.45 0.0069 0.0042  
 Mercury -37356-10-03 23:02 J -11922579.64 -11922579.54 -11922579.40 0.0069 0.0048  
 Mercury -37356-12-31 00:28 J -11922491.56 -11922491.48 -11922491.35 0.0069 0.0054  
 Mercury -37355-03-29 02:09 J -11922403.48 -11922403.41 -11922403.32 0.0069 0.0060  
 Mercury -37355-06-25 03:50 J -11922315.38 -11922315.34 -11922315.29 0.0069 0.0067  
 Venus -37276-05-10 17:16 J -11893505.99 -11893505.78 -11893505.55 0.0079 0.0021

Venus -37276-12-22 03:21 J -11893280.52 -11893280.36 -11893280.19 0.0078 0.0054  
 Moon -37275-11-02 14:09 J -11892965.13 -11892964.91 -11892964.67 0.0078 0.0037  
 Earth -37275-11-02 16:33 J -11892965.01 -11892964.81 -11892964.57 0.0078 0.0041 \*  
 Mercury -37274-07-20 20:23 J -11892704.70 -11892704.65 -11892704.57 0.0077 0.0070  
 Mercury -37274-10-16 21:50 J -11892616.66 -11892616.59 -11892616.49 0.0077 0.0062  
 Mercury -37273-01-12 23:30 J -11892528.62 -11892528.52 -11892528.41 0.0077 0.0054  
 Mercury -37273-04-10 00:57 J -11892440.57 -11892440.46 -11892440.34 0.0077 0.0046  
 Mercury -37273-07-07 02:09 J -11892352.53 -11892352.41 -11892352.27 0.0077 0.0039  
 Mercury -37273-10-03 03:50 J -11892264.48 -11892264.34 -11892264.20 0.0077 0.0031  
 Mercury -37273-12-30 05:02 J -11892176.42 -11892176.29 -11892176.14 0.0077 0.0024  
 Mercury -37272-03-28 06:28 J -11892088.37 -11892088.23 -11892088.08 0.0076 0.0016  
 Mercury -37272-06-24 07:54 J -11892000.32 -11892000.17 -11892000.02 0.0076 0.0008  
 Mercury -37272-09-20 09:21 J -11891912.26 -11891912.11 -11891911.96 0.0076 0.0002  
 Mercury -37272-12-17 10:33 J -11891824.21 -11891824.06 -11891823.91 0.0076 0.0006  
 Mercury -37271-03-15 11:45 J -11891736.15 -11891736.01 -11891735.86 0.0076 0.0014  
 Mercury -37271-06-11 13:11 J -11891648.09 -11891647.95 -11891647.81 0.0076 0.0021  
 Mercury -37271-09-07 14:23 J -11891560.03 -11891559.90 -11891559.76 0.0076 0.0028  
 Mercury -37271-12-04 15:50 J -11891471.97 -11891471.84 -11891471.71 0.0075 0.0035  
 Mercury -37270-03-02 17:02 J -11891383.91 -11891383.79 -11891383.67 0.0075 0.0042  
 Mercury -37270-05-29 18:14 J -11891295.85 -11891295.74 -11891295.62 0.0075 0.0049  
 Mercury -37270-08-25 19:26 J -11891207.78 -11891207.69 -11891207.59 0.0075 0.0055  
 Mercury -37270-11-21 20:38 J -11891119.71 -11891119.64 -11891119.55 0.0075 0.0062  
 Mercury -37269-02-17 21:50 J -11891031.64 -11891031.59 -11891031.53 0.0075 0.0069  
 Mars -37119-09-10 12:42 J -11836039.26 -11836038.97 -11836038.68 0.0064 0.0007  
 Venus -37116-08-09 06:14 J -11834975.36 -11834975.24 -11834975.06 0.0065 0.0049  
 Venus -37115-03-22 11:02 J -11834750.25 -11834750.04 -11834749.82 0.0066 0.0007  
 Venus -37115-11-02 14:52 J -11834525.04 -11834524.88 -11834524.68 0.0066 0.0036  
 Earth -37113-05-01 11:59 J -11833979.22 -11833979.00 -11833978.77 0.0066 0.0032  
 Moon -37113-05-01 14:52 J -11833979.08 -11833978.88 -11833978.62 0.0066 0.0031 \*  
 Moon -37112-05-02 23:02 J -11833612.70 -11833612.54 -11833612.34 0.0067 0.0048

Earth -37112-05-03 02:23 J -11833612.55 -11833612.40 -11833612.20 0.0067 0.0050 \*  
 Mercury -37112-06-28 05:59 J -11833556.29 -11833556.25 -11833556.18 0.0067 0.0063  
 Mercury -37112-09-24 07:40 J -11833468.26 -11833468.18 -11833468.10 0.0067 0.0057  
 Mercury -37112-12-21 08:38 J -11833380.23 -11833380.14 -11833380.02 0.0067 0.0052  
 Mercury -37111-03-19 10:04 J -11833292.19 -11833292.08 -11833291.95 0.0067 0.0046  
 Mercury -37111-06-15 11:02 J -11833204.15 -11833204.04 -11833203.89 0.0067 0.0042  
 Mercury -37111-09-11 12:28 J -11833116.11 -11833115.98 -11833115.82 0.0067 0.0036  
 Mercury -37111-12-08 13:54 J -11833028.06 -11833027.92 -11833027.76 0.0067 0.0030  
 Mercury -37110-03-06 15:06 J -11832940.01 -11832939.87 -11832939.70 0.0068 0.0025  
 Mercury -37110-06-02 16:33 J -11832851.96 -11832851.81 -11832851.64 0.0068 0.0019  
 Mercury -37110-08-29 17:59 J -11832763.91 -11832763.75 -11832763.58 0.0068 0.0013  
 Mercury -37110-11-25 19:26 J -11832675.85 -11832675.69 -11832675.52 0.0068 0.0007  
 Mercury -37109-02-21 20:52 J -11832587.80 -11832587.63 -11832587.46 0.0068 0.0001  
 Mercury -37109-05-19 22:18 J -11832499.74 -11832499.57 -11832499.40 0.0068 0.0005  
 Mercury -37109-08-15 23:30 J -11832411.68 -11832411.52 -11832411.35 0.0068 0.0011  
 Mercury -37109-11-12 00:57 J -11832323.62 -11832323.46 -11832323.29 0.0068 0.0017  
 Mercury -37108-02-08 02:09 J -11832235.56 -11832235.41 -11832235.24 0.0068 0.0024  
 Mercury -37108-05-07 03:35 J -11832147.49 -11832147.35 -11832147.18 0.0068 0.0030  
 Mercury -37108-08-03 05:02 J -11832059.42 -11832059.29 -11832059.13 0.0069 0.0036  
 Mercury -37108-10-30 06:28 J -11831971.35 -11831971.23 -11831971.08 0.0069 0.0042  
 Mercury -37107-01-26 08:09 J -11831883.27 -11831883.16 -11831883.03 0.0069 0.0048  
 Mercury -37107-04-24 09:35 J -11831795.20 -11831795.10 -11831794.99 0.0069 0.0054  
 Mercury -37107-07-21 10:47 J -11831707.11 -11831707.05 -11831706.95 0.0069 0.0061  
 Mercury -37107-10-17 12:28 J -11831619.00 -11831618.98 -11831618.93 0.0069 0.0067  
 Venus -37028-04-12 20:52 J -11802951.82 -11802951.63 -11802951.43 0.0079 0.0038  
 Venus -37028-11-24 06:57 J -11802726.40 -11802726.21 -11802726.00 0.0078 0.0037  
 Earth -37027-11-04 00:28 J -11802381.58 -11802381.48 -11802381.35 0.0078 0.0069  
 Moon -37027-11-04 03:35 J -11802381.46 -11802381.35 -11802381.21 0.0078 0.0067 \*  
 Mercury -37026-08-16 04:18 J -11802096.32 -11802096.32 -11802096.31 0.0077 0.0077  
 Moon -37026-11-05 22:33 J -11802014.70 -11802014.56 -11802014.37 0.0077 0.0059

Earth	-37026-11-06 02:09 J	-11802014.54	-11802014.41	-11802014.22	0.0077	0.0061	*
Mercury	-37026-11-12 05:30 J	-11802008.32	-11802008.27	-11802008.19	0.0077	0.0069	
Mercury	-37025-02-08 06:57 J	-11801920.29	-11801920.21	-11801920.11	0.0077	0.0062	
Mercury	-37025-05-06 08:38 J	-11801832.25	-11801832.14	-11801832.03	0.0077	0.0053	
Mercury	-37025-08-02 09:50 J	-11801744.20	-11801744.09	-11801743.96	0.0077	0.0046	
Mercury	-37025-10-29 11:16 J	-11801656.15	-11801656.03	-11801655.89	0.0077	0.0038	
Mercury	-37024-01-25 12:42 J	-11801568.10	-11801567.97	-11801567.83	0.0077	0.0030	
Mercury	-37024-04-23 14:09 J	-11801480.05	-11801479.91	-11801479.76	0.0076	0.0023	
Mercury	-37024-07-20 15:35 J	-11801392.00	-11801391.85	-11801391.70	0.0076	0.0015	
Mercury	-37024-10-16 16:47 J	-11801303.94	-11801303.80	-11801303.65	0.0076	0.0008	
Mercury	-37023-01-12 18:14 J	-11801215.89	-11801215.74	-11801215.59	0.0076	0.0001	
Mercury	-37023-04-10 19:40 J	-11801127.83	-11801127.68	-11801127.54	0.0076	0.0007	
Mercury	-37023-07-07 20:52 J	-11801039.78	-11801039.63	-11801039.48	0.0076	0.0014	
Mercury	-37023-10-03 22:04 J	-11800951.72	-11800951.58	-11800951.43	0.0076	0.0021	
Mercury	-37023-12-30 23:16 J	-11800863.66	-11800863.53	-11800863.38	0.0075	0.0029	
Mercury	-37022-03-29 00:28 J	-11800775.60	-11800775.48	-11800775.34	0.0075	0.0036	
Mercury	-37022-06-25 01:54 J	-11800687.54	-11800687.42	-11800687.30	0.0075	0.0042	
Mercury	-37022-09-21 03:06 J	-11800599.47	-11800599.37	-11800599.25	0.0075	0.0049	
Mercury	-37022-12-18 04:18 J	-11800511.41	-11800511.32	-11800511.22	0.0075	0.0056	
Mercury	-37021-03-15 05:16 J	-11800423.34	-11800423.28	-11800423.18	0.0075	0.0063	
Mercury	-37021-06-11 06:28 J	-11800335.26	-11800335.23	-11800335.16	0.0075	0.0070	

# 37TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 37th millennium BCE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
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TRANSIT

TIME

Mars -36871-12-19 13:40 J -11745357.22 -11745356.93 -11745356.63 0.0064 0.0002

Venus -36868-07-12 12:42 J -11744421.05 -11744420.97 -11744420.83 0.0065 0.0056

Venus -36867-02-22 17:30 J -11744195.98 -11744195.77 -11744195.55 0.0065 0.0015

Venus -36867-10-05 21:35 J -11743970.79 -11743970.60 -11743970.39 0.0066 0.0027

Moon -36865-05-02 17:02 J -11743395.93 -11743395.79 -11743395.59 0.0066 0.0050

Earth -36865-05-02 20:38 J -11743395.77 -11743395.64 -11743395.46 0.0066 0.0053 \*

Earth -36864-05-04 11:45 J -11743029.24 -11743029.01 -11743028.78 0.0067 0.0029

Moon -36864-05-04 14:52 J -11743029.11 -11743028.88 -11743028.62 0.0067 0.0026 \*

Mercury -36864-10-20 14:23 J -11742859.93 -11742859.90 -11742859.83 0.0067 0.0064

Mercury -36863-01-16 15:50 J -11742771.91 -11742771.84 -11742771.75 0.0067 0.0058

Mercury -36863-04-14 16:47 J -11742683.88 -11742683.80 -11742683.68 0.0067 0.0053

Mercury -36863-07-11 18:14 J -11742595.84 -11742595.74 -11742595.61 0.0067 0.0048

Mercury -36863-10-07 19:54 J -11742507.80 -11742507.67 -11742507.54 0.0067 0.0042

Mercury -36862-01-03 20:52 J -11742419.76 -11742419.63 -11742419.47 0.0067 0.0036

Mercury -36862-04-01 22:18 J -11742331.71 -11742331.57 -11742331.41 0.0068 0.0031

Mercury -36862-06-28 23:45 J -11742243.66 -11742243.51 -11742243.35 0.0068 0.0025

Mercury -36862-09-25 01:11 J -11742155.61 -11742155.45 -11742155.29 0.0068 0.0019

Mercury -36862-12-22 02:38 J -11742067.56 -11742067.39 -11742067.23 0.0068 0.0013

Mercury -36861-03-19 03:50 J -11741979.50 -11741979.34 -11741979.17 0.0068 0.0007

Mercury -36861-06-15 05:16 J -11741891.45 -11741891.28 -11741891.11 0.0068 0.0001

Mercury -36861-09-11 06:42 J -11741803.39 -11741803.22 -11741803.05 0.0068 0.0005

Mercury -36861-12-08 08:09 J -11741715.33 -11741715.16 -11741715.00 0.0068 0.0011

Mercury -36860-03-06 09:21 J -11741627.27 -11741627.11 -11741626.94 0.0068 0.0017

Mercury -36860-06-02 10:47 J -11741539.21 -11741539.05 -11741538.89 0.0068 0.0023

Mercury -36860-08-29 12:14 J -11741451.14 -11741450.99 -11741450.83 0.0069 0.0029

Mercury -36860-11-25 13:40 J -11741363.07 -11741362.93 -11741362.78 0.0069 0.0035

Mercury -36859-02-21 14:52 J -11741275.00 -11741274.88 -11741274.73 0.0069 0.0042

Mercury -36859-05-20 16:18 J -11741186.92 -11741186.82 -11741186.68 0.0069 0.0048

Mercury -36859-08-16 17:59 J -11741098.85 -11741098.75 -11741098.64 0.0069 0.0054

Mercury -36859-11-12 19:40 J -11741010.76 -11741010.68 -11741010.60 0.0069 0.0060

Mercury -36858-02-08 20:38 J -11740922.66 -11740922.64 -11740922.58 0.0069 0.0068

Jupiter -36781-01-26 15:50 J -11712812.17 -11712811.84 -11712811.39 0.0079 0.0055

Venus -36780-03-16 00:14 J -11712397.63 -11712397.49 -11712397.31 0.0079 0.0055

Venus -36780-10-27 10:47 J -11712172.26 -11712172.05 -11712171.83 0.0078 0.0020

Earth -36778-11-07 10:47 J -11711431.28 -11711431.05 -11711430.81 0.0077 0.0034

Moon -36778-11-07 14:09 J -11711431.13 -11711430.91 -11711430.67 0.0077 0.0037 \*

Mercury -36778-12-08 13:11 J -11711399.96 -11711399.95 -11711399.92 0.0077 0.0076

Mercury -36777-03-05 14:38 J -11711311.94 -11711311.89 -11711311.81 0.0077 0.0068

Mercury -36777-06-01 16:18 J -11711223.91 -11711223.82 -11711223.73 0.0077 0.0060

Mercury -36777-08-28 17:30 J -11711135.87 -11711135.77 -11711135.65 0.0077 0.0053

Mercury -36777-11-24 18:57 J -11711047.82 -11711047.71 -11711047.58 0.0077 0.0045

Mercury -36776-02-20 20:38 J -11710959.77 -11710959.64 -11710959.51 0.0077 0.0037

Mercury -36776-05-19 21:50 J -11710871.72 -11710871.59 -11710871.45 0.0076 0.0029

Mercury -36776-08-15 23:02 J -11710783.67 -11710783.54 -11710783.38 0.0076 0.0023

Mercury -36776-11-12 00:42 J -11710695.62 -11710695.47 -11710695.32 0.0076 0.0014

Mercury -36775-02-08 01:54 J -11710607.56 -11710607.42 -11710607.27 0.0076 0.0007

Mercury -36775-05-07 03:21 J -11710519.51 -11710519.36 -11710519.21 0.0076 0.0000

Mercury -36775-08-03 04:33 J -11710431.45 -11710431.31 -11710431.16 0.0076 0.0008

Mercury -36775-10-30 05:59 J -11710343.40 -11710343.25 -11710343.11 0.0076 0.0015

Mercury -36774-01-26 06:57 J -11710255.34 -11710255.21 -11710255.06 0.0075 0.0023

Mercury -36774-04-24 08:23 J -11710167.28 -11710167.15 -11710167.01 0.0075 0.0029

Mercury -36774-07-21 09:35 J -11710079.22 -11710079.10 -11710078.96 0.0075 0.0036

Mercury -36774-10-17 10:47 J -11709991.16 -11709991.05 -11709990.92 0.0075 0.0043

Mercury -36773-01-13 11:59 J -11709903.10 -11709903.00 -11709902.88 0.0075 0.0050

Mercury -36773-04-10 13:11 J -11709815.03 -11709814.95 -11709814.84 0.0075 0.0057

Mercury -36773-07-07 14:23 J -11709726.96 -11709726.90 -11709726.81 0.0075 0.0064

Mercury -36773-10-03 15:50 J -11709638.88 -11709638.84 -11709638.79 0.0075 0.0070

Mars -36622-03-29 11:30 J -11654675.31 -11654675.02 -11654674.72 0.0064 0.0003



Venus -36619-01-25 22:47 J -11653641.75 -11653641.55 -11653641.35 0.0065 0.0027

Venus -36619-09-08 02:52 J -11653416.59 -11653416.38 -11653416.16 0.0066 0.0015

Venus -36618-04-21 06:42 J -11653191.31 -11653191.22 -11653191.09 0.0066 0.0057

Moon -36616-05-05 16:04 J -11652446.08 -11652445.83 -11652445.58 0.0067 0.0005

Earth -36616-05-05 18:28 J -11652445.99 -11652445.73 -11652445.47 0.0067 0.0004 \*

Mercury -36615-02-11 22:18 J -11652163.58 -11652163.57 -11652163.53 0.0067 0.0066

Mercury -36615-05-10 23:59 J -11652075.57 -11652075.50 -11652075.43 0.0067 0.0060

Mercury -36615-08-07 00:57 J -11651987.54 -11651987.46 -11651987.35 0.0067 0.0055

Mercury -36615-11-03 02:23 J -11651899.51 -11651899.40 -11651899.28 0.0067 0.0049

Mercury -36614-01-30 03:21 J -11651811.47 -11651811.36 -11651811.21 0.0067 0.0045

Mercury -36614-04-28 04:47 J -11651723.42 -11651723.30 -11651723.15 0.0067 0.0039

Mercury -36614-07-25 06:14 J -11651635.38 -11651635.24 -11651635.08 0.0068 0.0033

Mercury -36614-10-21 07:40 J -11651547.33 -11651547.18 -11651547.02 0.0068 0.0027

Mercury -36613-01-17 09:06 J -11651459.28 -11651459.12 -11651458.96 0.0068 0.0021

Mercury -36613-04-14 10:18 J -11651371.23 -11651371.07 -11651370.90 0.0068 0.0015

Mercury -36613-07-11 11:45 J -11651283.17 -11651283.01 -11651282.84 0.0068 0.0010

Mercury -36613-10-07 13:11 J -11651195.12 -11651194.95 -11651194.78 0.0068 0.0004

Mercury -36612-01-03 14:38 J -11651107.06 -11651106.89 -11651106.72 0.0068 0.0003

Mercury -36612-04-01 15:50 J -11651019.00 -11651018.84 -11651018.67 0.0068 0.0009

Mercury -36612-06-28 17:16 J -11650930.94 -11650930.78 -11650930.61 0.0068 0.0015

Mercury -36612-09-24 18:42 J -11650842.88 -11650842.72 -11650842.55 0.0068 0.0021

Mercury -36612-12-21 20:09 J -11650754.81 -11650754.66 -11650754.50 0.0069 0.0027

Mercury -36611-03-19 21:35 J -11650666.74 -11650666.60 -11650666.45 0.0069 0.0033

Mercury -36611-06-15 23:16 J -11650578.67 -11650578.53 -11650578.40 0.0069 0.0039

Mercury -36611-09-12 00:14 J -11650490.60 -11650490.49 -11650490.35 0.0069 0.0046

Mercury -36611-12-09 01:40 J -11650402.52 -11650402.43 -11650402.30 0.0069 0.0052

Mercury -36610-03-07 03:21 J -11650314.44 -11650314.36 -11650314.26 0.0069 0.0059

Mercury -36610-06-03 04:33 J -11650226.34 -11650226.31 -11650226.23 0.0069 0.0066

Venus -36532-09-29 11:45 J -11621618.23 -11621618.01 -11621617.78 0.0079 0.0009

Venus -36531-05-12 21:21 J -11621392.71 -11621392.61 -11621392.46 0.0078 0.0066

Moon -36530-11-08 11:45 J -11620848.26 -11620848.01 -11620847.75 0.0077 0.0004  
 Earth -36530-11-08 14:38 J -11620848.14 -11620847.89 -11620847.63 0.0077 0.0007 \*  
 Mercury -36529-06-27 22:47 J -11620615.59 -11620615.55 -11620615.48 0.0077 0.0071  
 Mercury -36529-09-24 00:14 J -11620527.56 -11620527.49 -11620527.39 0.0077 0.0063  
 Mercury -36529-12-21 01:40 J -11620439.52 -11620439.43 -11620439.31 0.0077 0.0055  
 Mercury -36528-03-19 03:21 J -11620351.48 -11620351.36 -11620351.24 0.0077 0.0047  
 Mercury -36528-06-15 04:33 J -11620263.43 -11620263.31 -11620263.17 0.0076 0.0040  
 Mercury -36528-09-11 06:14 J -11620175.38 -11620175.24 -11620175.11 0.0076 0.0032  
 Mercury -36528-12-08 07:26 J -11620087.33 -11620087.19 -11620087.04 0.0076 0.0024  
 Mercury -36527-03-06 08:38 J -11619999.28 -11619999.14 -11619998.98 0.0076 0.0017  
 Mercury -36527-06-02 10:04 J -11619911.22 -11619911.08 -11619910.93 0.0076 0.0010  
 Mercury -36527-08-29 11:30 J -11619823.17 -11619823.02 -11619822.87 0.0076 0.0002  
 Mercury -36527-11-25 12:42 J -11619735.11 -11619734.97 -11619734.82 0.0076 0.0006  
 Mercury -36526-02-21 14:09 J -11619647.06 -11619646.91 -11619646.76 0.0076 0.0013  
 Mercury -36526-05-20 15:21 J -11619559.00 -11619558.86 -11619558.71 0.0075 0.0020  
 Mercury -36526-08-16 16:33 J -11619470.94 -11619470.81 -11619470.67 0.0075 0.0027  
 Mercury -36526-11-12 17:45 J -11619382.88 -11619382.76 -11619382.62 0.0075 0.0034  
 Mercury -36525-02-08 18:57 J -11619294.82 -11619294.71 -11619294.58 0.0075 0.0041  
 Mercury -36525-05-06 20:09 J -11619206.76 -11619206.66 -11619206.53 0.0075 0.0048  
 Mercury -36525-08-02 21:21 J -11619118.70 -11619118.61 -11619118.50 0.0075 0.0055  
 Mercury -36525-10-29 22:47 J -11619030.63 -11619030.55 -11619030.46 0.0075 0.0061  
 Mercury -36524-01-25 23:59 J -11618942.55 -11618942.50 -11618942.44 0.0075 0.0068  
 Mercury -36524-04-24 01:11 J -11618854.45 -11618854.45 -11618854.44 0.0074 0.0074  
 Mars -36374-07-07 07:54 J -11563993.47 -11563993.17 -11563992.88 0.0064 0.0002  
 Venus -36372-12-29 03:21 J -11563087.51 -11563087.36 -11563087.17 0.0065 0.0040  
 Venus -36371-08-11 07:54 J -11562862.39 -11562862.17 -11562861.95 0.0065 0.0001  
 Venus -36370-03-24 11:59 J -11562637.16 -11562637.00 -11562636.83 0.0066 0.0043  
 Earth -36368-05-07 00:28 J -11561862.71 -11561862.48 -11561862.22 0.0067 0.0024  
 Moon -36368-05-07 03:06 J -11561862.62 -11561862.37 -11561862.11 0.0067 0.0020 \*  
 Moon -36367-05-08 15:50 J -11561495.97 -11561495.84 -11561495.70 0.0067 0.0056

Earth -36367-05-08 14:52 J -11561495.95 -11561495.88 -11561495.72 0.0067 0.0060 \*  
 Mercury -36367-09-02 07:26 J -11561379.23 -11561379.19 -11561379.12 0.0067 0.0063  
 Mercury -36367-11-29 09:06 J -11561291.20 -11561291.12 -11561291.04 0.0067 0.0058  
 Mercury -36366-02-25 09:50 J -11561203.17 -11561203.09 -11561202.96 0.0067 0.0053  
 Mercury -36366-05-24 11:16 J -11561115.13 -11561115.03 -11561114.89 0.0067 0.0047  
 Mercury -36366-08-20 12:42 J -11561027.09 -11561026.97 -11561026.83 0.0068 0.0041  
 Mercury -36366-11-16 13:54 J -11560939.05 -11560938.92 -11560938.76 0.0068 0.0036  
 Mercury -36365-02-12 15:21 J -11560851.00 -11560850.86 -11560850.70 0.0068 0.0030  
 Mercury -36365-05-10 16:33 J -11560762.95 -11560762.81 -11560762.64 0.0068 0.0024  
 Mercury -36365-08-06 17:59 J -11560674.90 -11560674.75 -11560674.58 0.0068 0.0018  
 Mercury -36365-11-02 19:26 J -11560586.85 -11560586.69 -11560586.52 0.0068 0.0012  
 Mercury -36364-01-29 20:52 J -11560498.79 -11560498.63 -11560498.46 0.0068 0.0006  
 Mercury -36364-04-27 22:18 J -11560410.74 -11560410.57 -11560410.40 0.0068 0.0001  
 Mercury -36364-07-24 23:45 J -11560322.68 -11560322.51 -11560322.34 0.0068 0.0006  
 Mercury -36364-10-21 00:57 J -11560234.62 -11560234.46 -11560234.29 0.0068 0.0013  
 Mercury -36363-01-17 02:23 J -11560146.56 -11560146.40 -11560146.23 0.0069 0.0019  
 Mercury -36363-04-15 03:50 J -11560058.49 -11560058.34 -11560058.17 0.0069 0.0025  
 Mercury -36363-07-12 05:16 J -11559970.42 -11559970.28 -11559970.12 0.0069 0.0031  
 Mercury -36363-10-08 06:42 J -11559882.36 -11559882.22 -11559882.07 0.0069 0.0037  
 Mercury -36362-01-04 08:23 J -11559794.28 -11559794.15 -11559794.02 0.0069 0.0043  
 Mercury -36362-04-02 09:21 J -11559706.21 -11559706.11 -11559705.97 0.0069 0.0050  
 Mercury -36362-06-29 11:02 J -11559618.12 -11559618.04 -11559617.93 0.0069 0.0056  
 Mercury -36362-09-25 12:42 J -11559530.03 -11559529.97 -11559529.89 0.0069 0.0063  
 Mercury -36362-12-22 14:09 J -11559441.91 -11559441.91 -11559441.90 0.0069 0.0069  
 Venus -36284-09-01 12:42 J -11531064.15 -11531063.97 -11531063.75 0.0079 0.0035  
 Venus -36283-04-14 23:02 J -11530838.71 -11530838.54 -11530838.33 0.0078 0.0041  
 Earth -36282-11-09 18:57 J -11530264.91 -11530264.71 -11530264.48 0.0077 0.0043  
 Moon -36282-11-09 21:06 J -11530264.81 -11530264.62 -11530264.38 0.0077 0.0045 \*  
 Mercury -36281-10-20 07:11 J -11529919.24 -11529919.20 -11529919.14 0.0077 0.0072  
 Mercury -36280-01-16 08:52 J -11529831.21 -11529831.13 -11529831.05 0.0077 0.0064

Mercury -36280-04-14 10:04 J -11529743.17 -11529743.08 -11529742.97 0.0077 0.0057

Mercury -36280-07-11 11:30 J -11529655.12 -11529655.02 -11529654.89 0.0077 0.0049

Mercury -36280-10-07 13:11 J -11529567.08 -11529566.95 -11529566.82 0.0076 0.0041

Mercury -36279-01-03 14:23 J -11529479.03 -11529478.90 -11529478.76 0.0076 0.0033

Mercury -36279-04-01 15:50 J -11529390.98 -11529390.84 -11529390.70 0.0076 0.0026

Mercury -36279-06-28 17:16 J -11529302.92 -11529302.78 -11529302.63 0.0076 0.0018

Mercury -36279-09-24 18:28 J -11529214.87 -11529214.73 -11529214.58 0.0076 0.0011

Mercury -36279-12-21 19:54 J -11529126.82 -11529126.67 -11529126.52 0.0076 0.0003

Mercury -36278-03-19 21:06 J -11529038.76 -11529038.62 -11529038.47 0.0076 0.0005

Mercury -36278-06-15 22:33 J -11528950.71 -11528950.56 -11528950.41 0.0075 0.0011

Mercury -36278-09-11 23:45 J -11528862.65 -11528862.51 -11528862.36 0.0075 0.0018

Mercury -36278-12-09 00:57 J -11528774.59 -11528774.46 -11528774.31 0.0075 0.0026

Mercury -36277-03-06 02:23 J -11528686.53 -11528686.40 -11528686.27 0.0075 0.0032

Mercury -36277-06-02 03:35 J -11528598.47 -11528598.35 -11528598.22 0.0075 0.0039

Mercury -36277-08-29 04:47 J -11528510.41 -11528510.30 -11528510.18 0.0075 0.0046

Mercury -36277-11-25 05:59 J -11528422.35 -11528422.25 -11528422.14 0.0075 0.0053

Mercury -36276-02-21 07:11 J -11528334.28 -11528334.20 -11528334.11 0.0075 0.0060

Mercury -36276-05-20 08:09 J -11528246.21 -11528246.16 -11528246.08 0.0074 0.0067

Mercury -36276-08-16 09:21 J -11528158.12 -11528158.11 -11528158.07 0.0074 0.0073

Mars -36126-10-15 00:57 J -11473311.75 -11473311.46 -11473311.16 0.0064 0.0006

Venus -36124-12-01 06:42 J -11472533.29 -11472533.22 -11472533.10 0.0065 0.0058

Venus -36123-07-14 11:02 J -11472308.24 -11472308.04 -11472307.82 0.0065 0.0018

Venus -36122-02-24 15:21 J -11472083.05 -11472082.86 -11472082.64 0.0066 0.0025

Moon -36120-05-08 04:04 J -11471279.45 -11471279.33 -11471279.18 0.0066 0.0056

Earth -36120-05-08 04:47 J -11471279.44 -11471279.30 -11471279.16 0.0066 0.0056 \*

Moon -36119-05-09 17:59 J -11470912.98 -11470912.75 -11470912.48 0.0067 0.0027

Earth -36119-05-09 18:57 J -11470912.92 -11470912.71 -11470912.45 0.0067 0.0027 \*

Mercury -36118-03-23 15:35 J -11470594.89 -11470594.85 -11470594.76 0.0067 0.0063

Mercury -36118-06-19 17:16 J -11470506.86 -11470506.78 -11470506.68 0.0067 0.0056

Mercury -36118-09-15 18:42 J -11470418.83 -11470418.72 -11470418.61 0.0067 0.0051

Mercury -36118-12-12 19:40 J -11470330.79 -11470330.68 -11470330.54 0.0067 0.0046

Mercury -36117-03-09 21:06 J -11470242.74 -11470242.62 -11470242.47 0.0068 0.0040

Mercury -36117-06-05 22:33 J -11470154.70 -11470154.56 -11470154.41 0.0068 0.0034

Mercury -36117-09-01 23:45 J -11470066.65 -11470066.51 -11470066.35 0.0068 0.0028

Mercury -36117-11-29 01:11 J -11469978.60 -11469978.45 -11469978.28 0.0068 0.0022

Mercury -36116-02-25 02:38 J -11469890.55 -11469890.39 -11469890.22 0.0068 0.0016

Mercury -36116-05-24 04:04 J -11469802.50 -11469802.33 -11469802.16 0.0068 0.0010

Mercury -36116-08-20 05:30 J -11469714.44 -11469714.27 -11469714.10 0.0068 0.0004

Mercury -36116-11-16 06:42 J -11469626.38 -11469626.22 -11469626.05 0.0068 0.0003

Mercury -36115-02-12 08:09 J -11469538.32 -11469538.16 -11469537.99 0.0068 0.0008

Mercury -36115-05-11 09:35 J -11469450.26 -11469450.10 -11469449.93 0.0069 0.0014

Mercury -36115-08-07 11:02 J -11469362.20 -11469362.04 -11469361.88 0.0069 0.0020

Mercury -36115-11-03 12:14 J -11469274.14 -11469273.99 -11469273.82 0.0069 0.0027

Mercury -36114-01-30 13:40 J -11469186.07 -11469185.93 -11469185.77 0.0069 0.0033

Mercury -36114-04-28 15:06 J -11469098.00 -11469097.87 -11469097.72 0.0069 0.0039

Mercury -36114-07-25 16:47 J -11469009.92 -11469009.80 -11469009.67 0.0069 0.0045

Mercury -36114-10-21 17:59 J -11468921.84 -11468921.75 -11468921.62 0.0069 0.0052

Mercury -36113-01-17 19:26 J -11468833.76 -11468833.69 -11468833.58 0.0069 0.0059

Mercury -36113-04-14 21:21 J -11468745.67 -11468745.61 -11468745.55 0.0069 0.0065

Venus -36036-08-04 11:16 J -11440510.09 -11440510.03 -11440509.94 0.0079 0.0074

Venus -36035-03-17 22:04 J -11440284.81 -11440284.58 -11440284.36 0.0079 0.0002

Venus -36035-10-29 07:26 J -11440059.22 -11440059.19 -11440059.10 0.0078 0.0075

Moon -36033-11-11 20:09 J -11439314.88 -11439314.66 -11439314.42 0.0077 0.0039

Earth -36033-11-11 21:06 J -11439314.84 -11439314.62 -11439314.38 0.0077 0.0035 \*

Mercury -36032-05-10 15:50 J -11439134.88 -11439134.84 -11439134.76 0.0077 0.0070

Mercury -36032-08-06 17:30 J -11439046.85 -11439046.77 -11439046.67 0.0077 0.0062

Mercury -36032-11-02 18:57 J -11438958.81 -11438958.71 -11438958.59 0.0077 0.0054

Mercury -36031-01-29 20:38 J -11438870.76 -11438870.64 -11438870.52 0.0076 0.0046

Mercury -36031-04-27 21:50 J -11438782.71 -11438782.59 -11438782.45 0.0076 0.0038

Mercury -36031-07-24 23:02 J -11438694.66 -11438694.54 -11438694.39 0.0076 0.0031

Mercury -36031-10-21 00:42 J -11438606.61 -11438606.47 -11438606.33 0.0076 0.0023

Mercury -36030-01-17 01:54 J -11438518.56 -11438518.42 -11438518.27 0.0076 0.0016

Mercury -36030-04-15 03:21 J -11438430.51 -11438430.36 -11438430.21 0.0076 0.0008

Mercury -36030-07-12 04:47 J -11438342.45 -11438342.30 -11438342.15 0.0076 0.0002

Mercury -36030-10-08 05:59 J -11438254.40 -11438254.25 -11438254.10 0.0075 0.0006

Mercury -36029-01-04 07:11 J -11438166.34 -11438166.20 -11438166.05 0.0075 0.0014

Mercury -36029-04-01 08:38 J -11438078.28 -11438078.14 -11438078.00 0.0075 0.0021

Mercury -36029-06-28 09:35 J -11437990.23 -11437990.10 -11437989.95 0.0075 0.0028

Mercury -36029-09-24 10:47 J -11437902.17 -11437902.05 -11437901.91 0.0075 0.0035

Mercury -36029-12-21 11:59 J -11437814.11 -11437814.00 -11437813.86 0.0075 0.0042

Mercury -36028-03-19 13:11 J -11437726.05 -11437725.95 -11437725.82 0.0075 0.0049

Mercury -36028-06-15 14:23 J -11437637.98 -11437637.90 -11437637.78 0.0075 0.0056

Mercury -36028-09-11 15:50 J -11437549.91 -11437549.84 -11437549.75 0.0074 0.0062

Mercury -36028-12-08 17:02 J -11437461.84 -11437461.79 -11437461.73 0.0074 0.0069

# 36TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 36th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	-35877-01-22 16:47 J	-11382630.06	-11382629.80	-11382629.49	0.0064	0.0018		
Venus	-35875-06-16 14:38 J	-11381754.06	-11381753.89	-11381753.70	0.0065	0.0036		
Venus	-35874-01-27 18:57 J	-11381528.92	-11381528.71	-11381528.49	0.0065	0.0005		
Venus	-35874-09-09 22:47 J	-11381303.68	-11381303.55	-11381303.38	0.0066	0.0047		

Earth -35871-05-10 22:47 J -11380329.80 -11380329.55 -11380329.28 0.0067 0.0008  
 Moon -35871-05-11 00:57 J -11380329.70 -11380329.46 -11380329.20 0.0067 0.0005 \*  
 Mercury -35870-07-15 23:02 J -11379898.55 -11379898.54 -11379898.51 0.0067 0.0067  
 Mercury -35870-10-11 23:59 J -11379810.54 -11379810.50 -11379810.41 0.0067 0.0062  
 Mercury -35869-01-08 01:26 J -11379722.51 -11379722.44 -11379722.33 0.0067 0.0056  
 Mercury -35869-04-05 02:52 J -11379634.48 -11379634.38 -11379634.26 0.0068 0.0050  
 Mercury -35869-07-02 04:18 J -11379546.44 -11379546.32 -11379546.19 0.0068 0.0044  
 Mercury -35869-09-28 05:16 J -11379458.40 -11379458.28 -11379458.12 0.0068 0.0039  
 Mercury -35869-12-25 06:42 J -11379370.35 -11379370.22 -11379370.06 0.0068 0.0033  
 Mercury -35868-03-23 08:09 J -11379282.30 -11379282.16 -11379281.99 0.0068 0.0027  
 Mercury -35868-06-19 09:35 J -11379194.25 -11379194.10 -11379193.93 0.0068 0.0021  
 Mercury -35868-09-15 11:02 J -11379106.20 -11379106.04 -11379105.87 0.0068 0.0015  
 Mercury -35868-12-12 12:28 J -11379018.15 -11379017.98 -11379017.81 0.0068 0.0009  
 Mercury -35867-03-10 13:54 J -11378930.09 -11378929.92 -11378929.75 0.0068 0.0003  
 Mercury -35867-06-06 15:21 J -11378842.03 -11378841.86 -11378841.69 0.0068 0.0003  
 Mercury -35867-09-02 16:33 J -11378753.97 -11378753.81 -11378753.64 0.0069 0.0010  
 Mercury -35867-11-29 17:59 J -11378665.91 -11378665.75 -11378665.58 0.0069 0.0016  
 Mercury -35866-02-25 19:26 J -11378577.85 -11378577.69 -11378577.53 0.0069 0.0022  
 Mercury -35866-05-24 20:52 J -11378489.78 -11378489.63 -11378489.47 0.0069 0.0028  
 Mercury -35866-08-20 22:18 J -11378401.71 -11378401.57 -11378401.42 0.0069 0.0034  
 Mercury -35866-11-16 23:30 J -11378313.64 -11378313.52 -11378313.37 0.0069 0.0041  
 Mercury -35865-02-13 01:11 J -11378225.57 -11378225.45 -11378225.32 0.0069 0.0047  
 Mercury -35865-05-11 02:52 J -11378137.49 -11378137.38 -11378137.27 0.0069 0.0054  
 Mercury -35865-08-07 04:04 J -11378049.40 -11378049.33 -11378049.24 0.0069 0.0061  
 Mercury -35865-11-03 05:45 J -11377961.30 -11377961.26 -11377961.21 0.0070 0.0067  
 Venus -35787-02-17 20:38 J -11349730.83 -11349730.64 -11349730.42 0.0079 0.0035  
 Venus -35787-10-01 07:11 J -11349505.39 -11349505.20 -11349505.00 0.0078 0.0040  
 Earth -35785-11-12 22:18 J -11348731.83 -11348731.57 -11348731.31 0.0077 0.0011  
 Moon -35785-11-12 23:45 J -11348731.76 -11348731.51 -11348731.26 0.0077 0.0012 \*  
 Mercury -35784-09-01 23:30 J -11348438.54 -11348438.52 -11348438.46 0.0077 0.0074

Mercury -35784-11-29 00:57 J -11348350.52 -11348350.46 -11348350.37 0.0077 0.0066

Mercury -35783-02-25 02:38 J -11348262.48 -11348262.39 -11348262.29 0.0076 0.0058

Mercury -35783-05-24 04:18 J -11348174.44 -11348174.32 -11348174.21 0.0076 0.0050

Mercury -35783-08-20 05:16 J -11348086.39 -11348086.28 -11348086.14 0.0076 0.0043

Mercury -35783-11-16 06:57 J -11347998.34 -11347998.21 -11347998.08 0.0076 0.0035

Mercury -35782-02-12 08:09 J -11347910.29 -11347910.16 -11347910.01 0.0076 0.0027

Mercury -35782-05-11 09:35 J -11347822.24 -11347822.10 -11347821.95 0.0076 0.0020

Mercury -35782-08-07 11:02 J -11347734.19 -11347734.04 -11347733.89 0.0076 0.0012

Mercury -35782-11-03 12:14 J -11347646.13 -11347645.99 -11347645.84 0.0076 0.0005

Mercury -35781-01-30 13:40 J -11347558.08 -11347557.93 -11347557.78 0.0075 0.0003

Mercury -35781-04-27 14:52 J -11347470.02 -11347469.88 -11347469.73 0.0075 0.0010

Mercury -35781-07-24 16:04 J -11347381.97 -11347381.83 -11347381.68 0.0075 0.0017

Mercury -35781-10-20 17:16 J -11347293.91 -11347293.78 -11347293.63 0.0075 0.0024

Mercury -35780-01-16 18:42 J -11347205.85 -11347205.72 -11347205.58 0.0075 0.0031

Mercury -35780-04-14 19:54 J -11347117.79 -11347117.67 -11347117.54 0.0075 0.0038

Mercury -35780-07-11 21:06 J -11347029.73 -11347029.62 -11347029.50 0.0075 0.0045

Mercury -35780-10-07 22:18 J -11346941.67 -11346941.57 -11346941.46 0.0075 0.0052

Mercury -35779-01-03 23:16 J -11346853.60 -11346853.53 -11346853.42 0.0074 0.0059

Mercury -35779-04-02 00:28 J -11346765.53 -11346765.48 -11346765.39 0.0074 0.0065

Mercury -35779-06-29 01:54 J -11346677.45 -11346677.42 -11346677.38 0.0074 0.0071

Mars -35629-05-01 03:35 J -11291948.56 -11291948.35 -11291948.08 0.0064 0.0039

Venus -35627-05-19 15:35 J -11291199.88 -11291199.85 -11291199.75 0.0065 0.0062

Venus -35627-12-30 20:09 J -11290974.86 -11290974.66 -11290974.44 0.0065 0.0021

Venus -35626-08-13 00:14 J -11290749.69 -11290749.49 -11290749.27 0.0065 0.0020

Venus -35625-03-25 04:33 J -11290524.37 -11290524.31 -11290524.23 0.0066 0.0062

Moon -35623-05-11 19:11 J -11289746.85 -11289746.70 -11289746.50 0.0067 0.0050

Earth -35623-05-11 22:33 J -11289746.71 -11289746.56 -11289746.37 0.0067 0.0050 \*

Earth -35622-05-13 13:55 J -11289380.15 -11289379.92 -11289379.70 0.0067 0.0033

Moon -35622-05-13 16:47 J -11289380.00 -11289379.80 -11289379.55 0.0067 0.0033 \*

Mercury -35621-05-01 07:26 J -11289026.23 -11289026.19 -11289026.10 0.0067 0.0063



Mercury -35621-07-28 09:07 J -11288938.20 -11288938.12 -11288938.02 0.0067 0.0057

Mercury -35621-10-24 10:33 J -11288850.17 -11288850.06 -11288849.95 0.0068 0.0051

Mercury -35620-01-20 11:31 J -11288762.13 -11288762.02 -11288761.88 0.0068 0.0046

Mercury -35620-04-18 12:57 J -11288674.08 -11288673.96 -11288673.81 0.0068 0.0040

Mercury -35620-07-15 14:09 J -11288586.04 -11288585.91 -11288585.75 0.0068 0.0034

Mercury -35620-10-11 15:35 J -11288497.99 -11288497.85 -11288497.69 0.0068 0.0028

Mercury -35619-01-07 17:02 J -11288409.94 -11288409.79 -11288409.62 0.0068 0.0022

Mercury -35619-04-05 18:28 J -11288321.89 -11288321.73 -11288321.56 0.0068 0.0016

Mercury -35619-07-02 19:55 J -11288233.84 -11288233.67 -11288233.50 0.0068 0.0010

Mercury -35619-09-28 21:21 J -11288145.78 -11288145.61 -11288145.44 0.0068 0.0004

Mercury -35619-12-25 22:47 J -11288057.72 -11288057.55 -11288057.38 0.0069 0.0002

Mercury -35618-03-23 23:59 J -11287969.66 -11287969.50 -11287969.33 0.0069 0.0009

Mercury -35618-06-20 01:26 J -11287881.60 -11287881.44 -11287881.27 0.0069 0.0015

Mercury -35618-09-16 02:52 J -11287793.54 -11287793.38 -11287793.22 0.0069 0.0021

Mercury -35618-12-13 04:19 J -11287705.47 -11287705.32 -11287705.16 0.0069 0.0027

Mercury -35617-03-10 05:45 J -11287617.40 -11287617.26 -11287617.11 0.0069 0.0034

Mercury -35617-06-06 06:57 J -11287529.33 -11287529.21 -11287529.06 0.0069 0.0040

Mercury -35617-09-02 08:38 J -11287441.26 -11287441.14 -11287441.01 0.0069 0.0046

Mercury -35617-11-29 09:50 J -11287353.18 -11287353.09 -11287352.96 0.0069 0.0053

Mercury -35616-02-25 11:31 J -11287265.09 -11287265.02 -11287264.92 0.0070 0.0060

Mercury -35616-05-24 12:43 J -11287176.99 -11287176.97 -11287176.89 0.0070 0.0067

Venus -35539-09-03 02:23 J -11258951.61 -11258951.40 -11258951.17 0.0079 0.0013

Venus -35538-04-16 12:43 J -11258726.10 -11258725.97 -11258725.83 0.0078 0.0062

Earth -35537-11-13 16:47 J -11258148.82 -11258148.80 -11258148.70 0.0077 0.0076

Earth -35536-11-15 18:43 J -11257781.88 -11257781.72 -11257781.51 0.0077 0.0054

Moon -35536-11-15 22:33 J -11257781.72 -11257781.56 -11257781.38 0.0077 0.0057 \*

Mercury -35535-03-23 07:40 J -11257654.21 -11257654.18 -11257654.14 0.0077 0.0074

Mercury -35535-06-19 08:52 J -11257566.19 -11257566.13 -11257566.04 0.0077 0.0067

Mercury -35535-09-15 10:19 J -11257478.15 -11257478.07 -11257477.96 0.0076 0.0059

Mercury -35535-12-12 11:59 J -11257390.11 -11257390.00 -11257389.89 0.0076 0.0051

Mercury -35534-03-10 13:11 J -11257302.06 -11257301.95 -11257301.82 0.0076 0.0043  
 Mercury -35534-06-06 14:38 J -11257214.01 -11257213.89 -11257213.75 0.0076 0.0036  
 Mercury -35534-09-02 16:04 J -11257125.96 -11257125.83 -11257125.69 0.0076 0.0028  
 Mercury -35534-11-29 17:16 J -11257037.91 -11257037.78 -11257037.62 0.0076 0.0021  
 Mercury -35533-02-25 18:57 J -11256949.86 -11256949.71 -11256949.57 0.0076 0.0013  
 Mercury -35533-05-23 20:09 J -11256861.81 -11256861.66 -11256861.51 0.0075 0.0006  
 Mercury -35533-08-19 21:35 J -11256773.75 -11256773.60 -11256773.45 0.0075 0.0002  
 Mercury -35533-11-15 22:47 J -11256685.70 -11256685.55 -11256685.40 0.0075 0.0009  
 Mercury -35532-02-11 23:59 J -11256597.64 -11256597.50 -11256597.35 0.0075 0.0016  
 Mercury -35532-05-11 01:11 J -11256509.58 -11256509.45 -11256509.30 0.0075 0.0023  
 Mercury -35532-08-07 02:38 J -11256421.53 -11256421.39 -11256421.25 0.0075 0.0030  
 Mercury -35532-11-03 03:50 J -11256333.47 -11256333.34 -11256333.21 0.0075 0.0037  
 Mercury -35531-01-30 05:02 J -11256245.41 -11256245.29 -11256245.17 0.0075 0.0044  
 Mercury -35531-04-28 06:14 J -11256157.34 -11256157.24 -11256157.13 0.0074 0.0051  
 Mercury -35531-07-25 07:26 J -11256069.28 -11256069.19 -11256069.09 0.0074 0.0057  
 Mercury -35531-10-21 08:23 J -11255981.21 -11255981.15 -11255981.06 0.0074 0.0064  
 Mercury -35530-01-17 09:21 J -11255893.13 -11255893.11 -11255893.05 0.0074 0.0072  
 Mars -35381-08-08 12:57 J -11201267.00 -11201266.96 -11201266.86 0.0064 0.0063  
 Venus -35379-12-02 21:07 J -11200420.75 -11200420.62 -11200420.46 0.0065 0.0048  
 Venus -35378-07-16 01:26 J -11200195.65 -11200195.44 -11200195.22 0.0065 0.0007  
 Venus -35377-02-26 05:16 J -11199970.44 -11199970.28 -11199970.07 0.0065 0.0035  
 Moon -35374-05-14 10:04 J -11198797.34 -11198797.08 -11198796.83 0.0067 0.0007  
 Earth -35374-05-14 13:11 J -11198797.20 -11198796.95 -11198796.69 0.0067 0.0011 \*  
 Mercury -35373-11-19 15:21 J -11198241.91 -11198241.86 -11198241.81 0.0067 0.0064  
 Mercury -35372-02-15 16:19 J -11198153.89 -11198153.82 -11198153.72 0.0068 0.0059  
 Mercury -35372-05-14 17:31 J -11198065.85 -11198065.77 -11198065.65 0.0068 0.0053  
 Mercury -35372-08-10 18:57 J -11197977.82 -11197977.71 -11197977.58 0.0068 0.0047  
 Mercury -35372-11-06 20:23 J -11197889.77 -11197889.65 -11197889.51 0.0068 0.0041  
 Mercury -35371-02-02 21:50 J -11197801.73 -11197801.59 -11197801.45 0.0068 0.0035  
 Mercury -35371-05-01 23:16 J -11197713.68 -11197713.53 -11197713.38 0.0068 0.0030

Mercury -35371-07-29 00:14 J -11197625.63 -11197625.49 -11197625.32 0.0068 0.0024  
 Mercury -35371-10-25 01:55 J -11197537.58 -11197537.42 -11197537.26 0.0068 0.0018  
 Mercury -35370-01-21 03:21 J -11197449.53 -11197449.36 -11197449.20 0.0068 0.0012  
 Mercury -35370-04-19 04:47 J -11197361.47 -11197361.30 -11197361.14 0.0068 0.0006  
 Mercury -35370-07-16 05:59 J -11197273.41 -11197273.25 -11197273.08 0.0069 0.0002  
 Mercury -35370-10-12 07:26 J -11197185.36 -11197185.19 -11197185.02 0.0069 0.0007  
 Mercury -35369-01-08 08:52 J -11197097.29 -11197097.13 -11197096.96 0.0069 0.0013  
 Mercury -35369-04-05 10:19 J -11197009.23 -11197009.07 -11197008.91 0.0069 0.0019  
 Mercury -35369-07-02 11:31 J -11196921.17 -11196921.02 -11196920.85 0.0069 0.0026  
 Mercury -35369-09-28 12:57 J -11196833.10 -11196832.96 -11196832.80 0.0069 0.0032  
 Mercury -35369-12-25 14:38 J -11196745.03 -11196744.89 -11196744.75 0.0069 0.0039  
 Mercury -35368-03-23 15:50 J -11196656.95 -11196656.84 -11196656.70 0.0069 0.0045  
 Mercury -35368-06-19 17:31 J -11196568.88 -11196568.77 -11196568.65 0.0069 0.0052  
 Mercury -35368-09-15 18:43 J -11196480.79 -11196480.72 -11196480.61 0.0070 0.0059  
 Mercury -35368-12-12 20:23 J -11196392.70 -11196392.65 -11196392.58 0.0070 0.0065  
 Venus -35291-08-05 21:35 J -11168397.70 -11168397.60 -11168397.44 0.0079 0.0064  
 Venus -35290-03-19 08:23 J -11168172.37 -11168172.15 -11168171.92 0.0079 0.0012  
 Moon -35288-11-16 11:31 J -11167199.28 -11167199.02 -11167198.77 0.0077 0.0008  
 Earth -35288-11-16 15:07 J -11167199.13 -11167198.87 -11167198.61 0.0077 0.0007 \*  
 Mercury -35287-10-11 15:35 J -11166869.88 -11166869.85 -11166869.81 0.0077 0.0074  
 Mercury -35286-01-07 16:47 J -11166781.86 -11166781.80 -11166781.71 0.0076 0.0067  
 Mercury -35286-04-05 18:14 J -11166693.82 -11166693.74 -11166693.63 0.0076 0.0059  
 Mercury -35286-07-02 19:55 J -11166605.78 -11166605.67 -11166605.56 0.0076 0.0051  
 Mercury -35286-09-28 21:07 J -11166517.73 -11166517.62 -11166517.49 0.0076 0.0043  
 Mercury -35286-12-25 22:47 J -11166429.68 -11166429.55 -11166429.42 0.0076 0.0035  
 Mercury -35285-03-22 23:59 J -11166341.63 -11166341.50 -11166341.36 0.0076 0.0028  
 Mercury -35285-06-19 01:11 J -11166253.58 -11166253.45 -11166253.30 0.0076 0.0021  
 Mercury -35285-09-15 02:38 J -11166165.53 -11166165.39 -11166165.24 0.0076 0.0013  
 Mercury -35285-12-12 04:04 J -11166077.48 -11166077.33 -11166077.18 0.0075 0.0006  
 Mercury -35284-03-10 05:31 J -11165989.42 -11165989.27 -11165989.13 0.0075 0.0003

Mercury -35284-06-06 06:43 J -11165901.37 -11165901.22 -11165901.07 0.0075 0.0009  
 Mercury -35284-09-02 07:55 J -11165813.31 -11165813.17 -11165813.02 0.0075 0.0016  
 Mercury -35284-11-29 09:07 J -11165725.26 -11165725.12 -11165724.97 0.0075 0.0023  
 Mercury -35283-02-25 10:19 J -11165637.20 -11165637.07 -11165636.93 0.0075 0.0030  
 Mercury -35283-05-24 11:45 J -11165549.14 -11165549.01 -11165548.88 0.0075 0.0037  
 Mercury -35283-08-20 12:57 J -11165461.08 -11165460.96 -11165460.84 0.0075 0.0044  
 Mercury -35283-11-16 13:55 J -11165373.02 -11165372.92 -11165372.80 0.0074 0.0051  
 Mercury -35282-02-12 15:07 J -11165284.95 -11165284.87 -11165284.77 0.0074 0.0058  
 Mercury -35282-05-11 16:19 J -11165196.88 -11165196.82 -11165196.74 0.0074 0.0064  
 Mercury -35282-08-07 17:45 J -11165108.80 -11165108.76 -11165108.72 0.0074 0.0070  
 Venus -35130-06-18 00:28 J -11109641.64 -11109641.48 -11109641.31 0.0065 0.0042  
 Venus -35129-01-29 04:33 J -11109416.52 -11109416.31 -11109416.09 0.0065 0.0002  
 Venus -35129-09-10 08:23 J -11109191.31 -11109191.15 -11109190.96 0.0065 0.0040  
 Earth -35126-05-15 07:26 J -11108214.22 -11108214.19 -11108214.09 0.0067 0.0065  
 Moon -35126-05-15 10:33 J -11108214.13 -11108214.06 -11108213.96 0.0067 0.0063 \*  
 Moon -35125-05-15 21:50 J -11107847.82 -11107847.59 -11107847.33 0.0067 0.0019  
 Earth -35125-05-15 23:02 J -11107847.78 -11107847.54 -11107847.28 0.0067 0.0019 \*  
 Mercury -35124-09-05 22:33 J -11107369.61 -11107369.56 -11107369.49 0.0067 0.0063  
 Mercury -35124-12-02 23:31 J -11107281.58 -11107281.52 -11107281.41 0.0068 0.0058  
 Mercury -35123-03-01 00:57 J -11107193.55 -11107193.46 -11107193.33 0.0068 0.0052  
 Mercury -35123-05-28 02:23 J -11107105.51 -11107105.40 -11107105.26 0.0068 0.0046  
 Mercury -35123-08-24 03:50 J -11107017.46 -11107017.34 -11107017.20 0.0068 0.0040  
 Mercury -35123-11-20 05:16 J -11106929.42 -11106929.28 -11106929.13 0.0068 0.0034  
 Mercury -35122-02-16 06:28 J -11106841.37 -11106841.23 -11106841.07 0.0068 0.0028  
 Mercury -35122-05-15 07:55 J -11106753.32 -11106753.17 -11106753.00 0.0068 0.0022  
 Mercury -35122-08-11 09:21 J -11106665.27 -11106665.11 -11106664.94 0.0068 0.0016  
 Mercury -35122-11-07 10:47 J -11106577.21 -11106577.05 -11106576.88 0.0068 0.0010  
 Mercury -35121-02-03 12:14 J -11106489.16 -11106488.99 -11106488.82 0.0069 0.0004  
 Mercury -35121-05-01 13:40 J -11106401.10 -11106400.93 -11106400.76 0.0069 0.0002  
 Mercury -35121-07-28 14:52 J -11106313.04 -11106312.88 -11106312.71 0.0069 0.0009

Mercury -35121-10-24 16:19 J -11106224.98 -11106224.82 -11106224.65 0.0069 0.0015  
 Mercury -35120-01-20 17:45 J -11106136.92 -11106136.76 -11106136.59 0.0069 0.0021  
 Mercury -35120-04-18 19:11 J -11106048.85 -11106048.70 -11106048.54 0.0069 0.0027  
 Mercury -35120-07-15 20:23 J -11105960.78 -11105960.65 -11105960.49 0.0069 0.0034  
 Mercury -35120-10-11 22:04 J -11105872.71 -11105872.58 -11105872.44 0.0069 0.0040  
 Mercury -35119-01-07 23:45 J -11105784.64 -11105784.51 -11105784.39 0.0069 0.0047  
 Mercury -35119-04-06 00:57 J -11105696.56 -11105696.46 -11105696.34 0.0070 0.0054  
 Mercury -35119-07-03 02:09 J -11105608.47 -11105608.41 -11105608.30 0.0070 0.0061  
 Mercury -35119-09-29 03:50 J -11105520.37 -11105520.34 -11105520.28 0.0070 0.0067  
 Mars -35043-03-08 20:38 J -11077965.95 -11077965.64 -11077965.30 0.0079 0.0023  
 Venus -35042-02-18 23:16 J -11077618.67 -11077618.53 -11077618.38 0.0079 0.0059  
 Venus -35042-10-02 09:50 J -11077393.31 -11077393.09 -11077392.87 0.0079 0.0016  
 Moon -35039-11-19 03:35 J -11076249.54 -11076249.35 -11076249.13 0.0077 0.0043  
 Earth -35039-11-19 05:16 J -11076249.49 -11076249.28 -11076249.04 0.0077 0.0039 \*  
 Mercury -35038-07-28 23:16 J -11075997.56 -11075997.53 -11075997.46 0.0076 0.0072  
 Mercury -35038-10-25 00:57 J -11075909.54 -11075909.46 -11075909.37 0.0076 0.0064  
 Mercury -35037-01-21 02:09 J -11075821.50 -11075821.41 -11075821.29 0.0076 0.0056  
 Mercury -35037-04-18 03:35 J -11075733.45 -11075733.35 -11075733.22 0.0076 0.0048  
 Mercury -35037-07-15 05:16 J -11075645.41 -11075645.28 -11075645.15 0.0076 0.0040  
 Mercury -35037-10-11 06:28 J -11075557.36 -11075557.23 -11075557.09 0.0076 0.0033  
 Mercury -35036-01-07 07:55 J -11075469.31 -11075469.17 -11075469.03 0.0076 0.0025  
 Mercury -35036-04-05 09:21 J -11075381.26 -11075381.11 -11075380.97 0.0076 0.0018  
 Mercury -35036-07-02 10:33 J -11075293.20 -11075293.06 -11075292.91 0.0075 0.0011  
 Mercury -35036-09-28 11:59 J -11075205.15 -11075205.00 -11075204.85 0.0075 0.0003  
 Mercury -35036-12-25 13:11 J -11075117.09 -11075116.95 -11075116.80 0.0075 0.0004  
 Mercury -35035-03-23 14:38 J -11075029.04 -11075028.89 -11075028.75 0.0075 0.0011  
 Mercury -35035-06-19 15:50 J -11074940.98 -11074940.84 -11074940.69 0.0075 0.0018  
 Mercury -35035-09-15 16:47 J -11074852.93 -11074852.80 -11074852.65 0.0075 0.0026  
 Mercury -35035-12-12 17:59 J -11074764.87 -11074764.75 -11074764.60 0.0075 0.0033  
 Mercury -35034-03-10 19:11 J -11074676.81 -11074676.70 -11074676.56 0.0075 0.0040

Mercury -35034-06-06 20:23 J -11074588.75 -11074588.65 -11074588.52 0.0074 0.0047

Mercury -35034-09-02 22:04 J -11074500.68 -11074500.58 -11074500.48 0.0074 0.0053

Mercury -35034-11-29 23:02 J -11074412.62 -11074412.54 -11074412.44 0.0074 0.0060

Mercury -35033-02-26 00:14 J -11074324.55 -11074324.49 -11074324.42 0.0074 0.0066

Mercury -35033-05-24 01:11 J -11074236.46 -11074236.45 -11074236.41 0.0074 0.0073

# 35TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 35th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-34881-01-01 03:07 J	-11018862.54	-11018862.37	-11018862.19	0.0065	0.0037		
Venus	-34881-08-13 07:11 J	-11018637.42	-11018637.20	-11018636.98	0.0065	0.0003		
Venus	-34880-03-26 11:02 J	-11018412.18	-11018412.04	-11018411.87	0.0065	0.0045		
Moon	-34877-05-16 16:33 J	-11017265.02	-11017264.81	-11017264.55	0.0067	0.0033		
Earth	-34877-05-16 17:45 J	-11017264.96	-11017264.76	-11017264.53	0.0067	0.0036	*	
Earth	-34876-05-18 09:07 J	-11016898.29	-11016898.12	-11016897.94	0.0067	0.0049		
Moon	-34876-05-18 11:02 J	-11016898.21	-11016898.04	-11016897.84	0.0067	0.0046	*	
Mercury	-34875-03-27 05:02 J	-11016585.29	-11016585.29	-11016585.29	0.0067	0.0067		
Mercury	-34875-06-23 05:59 J	-11016497.30	-11016497.25	-11016497.17	0.0068	0.0062		
Mercury	-34875-09-19 07:40 J	-11016409.27	-11016409.18	-11016409.09	0.0068	0.0056		
Mercury	-34875-12-16 08:23 J	-11016321.24	-11016321.15	-11016321.02	0.0068	0.0051		
Mercury	-34874-03-14 09:50 J	-11016233.20	-11016233.09	-11016232.95	0.0068	0.0045		
Mercury	-34874-06-10 11:16 J	-11016145.15	-11016145.03	-11016144.88	0.0068	0.0039		

Mercury -34874-09-06 12:43 J -11016057.11 -11016056.97 -11016056.82 0.0068 0.0033

Mercury -34874-12-03 13:55 J -11015969.06 -11015968.92 -11015968.75 0.0068 0.0028

Mercury -34873-02-29 15:21 J -11015881.01 -11015880.86 -11015880.69 0.0068 0.0021

Mercury -34873-05-27 16:47 J -11015792.96 -11015792.80 -11015792.63 0.0068 0.0015

Mercury -34873-08-23 18:28 J -11015704.90 -11015704.73 -11015704.57 0.0069 0.0009

Mercury -34873-11-19 19:40 J -11015616.84 -11015616.68 -11015616.51 0.0069 0.0003

Mercury -34872-02-15 21:07 J -11015528.79 -11015528.62 -11015528.45 0.0069 0.0004

Mercury -34872-05-14 22:33 J -11015440.73 -11015440.56 -11015440.39 0.0069 0.0010

Mercury -34872-08-10 23:59 J -11015352.66 -11015352.50 -11015352.33 0.0069 0.0016

Mercury -34872-11-07 01:26 J -11015264.60 -11015264.44 -11015264.28 0.0069 0.0023

Mercury -34871-02-03 02:38 J -11015176.53 -11015176.39 -11015176.23 0.0069 0.0029

Mercury -34871-05-02 04:04 J -11015088.46 -11015088.33 -11015088.17 0.0069 0.0036

Mercury -34871-07-29 05:31 J -11015000.39 -11015000.27 -11015000.12 0.0069 0.0042

Mercury -34871-10-25 06:57 J -11014912.31 -11014912.21 -11014912.07 0.0070 0.0049

Mercury -34870-01-21 08:23 J -11014824.23 -11014824.15 -11014824.03 0.0070 0.0056

Mercury -34870-04-19 10:04 J -11014736.14 -11014736.08 -11014735.99 0.0070 0.0062

Mercury -34870-07-16 11:31 J -11014648.03 -11014648.02 -11014647.98 0.0070 0.0069

Mars -34795-06-14 14:38 J -10987286.10 -10987285.89 -10987285.64 0.0080 0.0059

Venus -34794-09-04 00:57 J -10986839.61 -10986839.46 -10986839.28 0.0079 0.0053

Venus -34793-04-16 11:45 J -10986614.23 -10986614.01 -10986613.80 0.0079 0.0022

Moon -34791-11-19 18:28 J -10985666.93 -10985666.73 -10985666.49 0.0077 0.0042

Earth -34791-11-19 18:28 J -10985666.92 -10985666.73 -10985666.49 0.0077 0.0041 \*

Mercury -34789-02-16 05:59 J -10985213.25 -10985213.25 -10985213.23 0.0076 0.0076

Mercury -34789-05-14 07:26 J -10985125.24 -10985125.19 -10985125.11 0.0076 0.0069

Mercury -34789-08-10 08:52 J -10985037.21 -10985037.13 -10985037.03 0.0076 0.0061

Mercury -34789-11-06 10:04 J -10984949.17 -10984949.08 -10984948.95 0.0076 0.0053

Mercury -34788-02-02 11:45 J -10984861.12 -10984861.01 -10984860.88 0.0076 0.0045

Mercury -34788-05-01 12:57 J -10984773.08 -10984772.96 -10984772.82 0.0076 0.0038

Mercury -34788-07-28 14:38 J -10984685.03 -10984684.89 -10984684.75 0.0076 0.0030

Mercury -34788-10-24 15:50 J -10984596.98 -10984596.84 -10984596.69 0.0076 0.0023

Mercury -34787-01-20 17:16 J -10984508.93 -10984508.78 -10984508.63 0.0075 0.0015

Mercury -34787-04-18 18:28 J -10984420.87 -10984420.73 -10984420.57 0.0075 0.0008

Mercury -34787-07-15 19:55 J -10984332.82 -10984332.67 -10984332.52 0.0075 0.0001

Mercury -34787-10-11 21:07 J -10984244.76 -10984244.62 -10984244.47 0.0075 0.0007

Mercury -34786-01-07 22:33 J -10984156.71 -10984156.56 -10984156.42 0.0075 0.0014

Mercury -34786-04-05 23:45 J -10984068.65 -10984068.51 -10984068.37 0.0075 0.0021

Mercury -34786-07-03 00:57 J -10983980.59 -10983980.46 -10983980.32 0.0075 0.0028

Mercury -34786-09-29 02:09 J -10983892.54 -10983892.41 -10983892.27 0.0075 0.0035

Mercury -34786-12-26 03:21 J -10983804.48 -10983804.36 -10983804.23 0.0074 0.0042

Mercury -34785-03-23 04:33 J -10983716.41 -10983716.31 -10983716.19 0.0074 0.0049

Mercury -34785-06-19 05:45 J -10983628.35 -10983628.26 -10983628.16 0.0074 0.0055

Mercury -34785-09-15 06:43 J -10983540.28 -10983540.22 -10983540.12 0.0074 0.0063

Mercury -34785-12-12 07:55 J -10983452.21 -10983452.17 -10983452.10 0.0074 0.0069

Mars -34634-04-23 14:23 J -10928533.16 -10928532.90 -10928532.61 0.0064 0.0022

Venus -34633-07-16 04:04 J -10928083.50 -10928083.33 -10928083.15 0.0065 0.0039

Venus -34632-02-26 08:23 J -10927858.37 -10927858.15 -10927857.94 0.0065 0.0002

Venus -34632-10-09 11:45 J -10927633.15 -10927633.01 -10927632.82 0.0065 0.0043

Moon -34628-05-18 20:23 J -10926315.89 -10926315.65 -10926315.38 0.0067 0.0016

Earth -34628-05-18 23:59 J -10926315.74 -10926315.50 -10926315.24 0.0067 0.0016 \*

Mercury -34626-04-09 12:14 J -10925625.02 -10925624.99 -10925624.91 0.0068 0.0064

Mercury -34626-07-06 13:40 J -10925537.00 -10925536.93 -10925536.83 0.0068 0.0058

Mercury -34626-10-02 15:07 J -10925448.96 -10925448.87 -10925448.75 0.0068 0.0052

Mercury -34626-12-29 16:33 J -10925360.92 -10925360.81 -10925360.68 0.0068 0.0046

Mercury -34625-03-26 17:59 J -10925272.88 -10925272.75 -10925272.61 0.0068 0.0040

Mercury -34625-06-22 19:11 J -10925184.84 -10925184.70 -10925184.55 0.0068 0.0035

Mercury -34625-09-18 20:38 J -10925096.79 -10925096.64 -10925096.48 0.0068 0.0028

Mercury -34625-12-15 21:50 J -10925008.74 -10925008.59 -10925008.42 0.0068 0.0023

Mercury -34624-03-13 23:16 J -10924920.68 -10924920.53 -10924920.36 0.0068 0.0017

Mercury -34624-06-10 00:43 J -10924832.63 -10924832.47 -10924832.30 0.0069 0.0011

Mercury -34624-09-06 02:09 J -10924744.57 -10924744.41 -10924744.24 0.0069 0.0004



Mercury -34624-12-03 03:35 J -10924656.52 -10924656.35 -10924656.18 0.0069 0.0002

Mercury -34623-03-01 05:02 J -10924568.46 -10924568.29 -10924568.12 0.0069 0.0008

Mercury -34623-05-28 06:14 J -10924480.39 -10924480.24 -10924480.06 0.0069 0.0015

Mercury -34623-08-24 07:40 J -10924392.33 -10924392.18 -10924392.01 0.0069 0.0022

Mercury -34623-11-20 09:21 J -10924304.26 -10924304.11 -10924303.95 0.0069 0.0028

Mercury -34622-02-16 10:33 J -10924216.20 -10924216.06 -10924215.90 0.0069 0.0034

Mercury -34622-05-15 12:14 J -10924128.12 -10924127.99 -10924127.85 0.0069 0.0041

Mercury -34622-08-11 13:26 J -10924040.05 -10924039.94 -10924039.80 0.0070 0.0048

Mercury -34622-11-07 15:07 J -10923951.97 -10923951.87 -10923951.76 0.0070 0.0054

Mercury -34621-02-03 16:33 J -10923863.88 -10923863.81 -10923863.72 0.0070 0.0061

Mercury -34621-05-01 17:45 J -10923775.78 -10923775.76 -10923775.70 0.0070 0.0068

Venus -34545-03-18 22:19 J -10896060.68 -10896060.57 -10896060.42 0.0079 0.0065

Venus -34545-10-30 09:07 J -10895835.34 -10895835.12 -10895834.89 0.0079 0.0011

Moon -34542-11-22 00:57 J -10894717.72 -10894717.46 -10894717.19 0.0077 0.0006

Earth -34542-11-22 03:50 J -10894717.59 -10894717.34 -10894717.08 0.0077 0.0010 \*

Mercury -34540-02-28 14:23 J -10894252.96 -10894252.90 -10894252.84 0.0076 0.0070

Mercury -34540-05-27 15:35 J -10894164.92 -10894164.85 -10894164.75 0.0076 0.0062

Mercury -34540-08-23 17:02 J -10894076.88 -10894076.79 -10894076.68 0.0076 0.0054

Mercury -34540-11-19 18:14 J -10893988.84 -10893988.74 -10893988.60 0.0076 0.0047

Mercury -34539-02-15 19:55 J -10893900.79 -10893900.67 -10893900.54 0.0076 0.0039

Mercury -34539-05-14 21:07 J -10893812.74 -10893812.62 -10893812.47 0.0076 0.0032

Mercury -34539-08-10 22:47 J -10893724.69 -10893724.55 -10893724.41 0.0076 0.0024

Mercury -34539-11-06 23:59 J -10893636.64 -10893636.50 -10893636.35 0.0075 0.0017

Mercury -34538-02-03 01:26 J -10893548.59 -10893548.44 -10893548.29 0.0075 0.0009

Mercury -34538-05-02 02:38 J -10893460.54 -10893460.39 -10893460.24 0.0075 0.0002

Mercury -34538-07-29 03:50 J -10893372.48 -10893372.34 -10893372.18 0.0075 0.0006

Mercury -34538-10-25 05:16 J -10893284.43 -10893284.28 -10893284.13 0.0075 0.0013

Mercury -34537-01-21 06:28 J -10893196.37 -10893196.23 -10893196.08 0.0075 0.0020

Mercury -34537-04-18 07:40 J -10893108.31 -10893108.18 -10893108.04 0.0075 0.0027

Mercury -34537-07-15 08:52 J -10893020.25 -10893020.13 -10893019.99 0.0074 0.0034

Mercury -34537-10-11 10:04 J -10892932.19 -10892932.08 -10892931.95 0.0074 0.0041

Mercury -34536-01-07 11:16 J -10892844.13 -10892844.03 -10892843.91 0.0074 0.0048

Mercury -34536-04-05 12:28 J -10892756.07 -10892755.98 -10892755.87 0.0074 0.0054

Mercury -34536-07-02 13:40 J -10892668.00 -10892667.93 -10892667.84 0.0074 0.0061

Mercury -34536-09-28 15:07 J -10892579.93 -10892579.87 -10892579.81 0.0074 0.0067

Mars -34386-07-31 13:26 J -10837852.19 -10837851.94 -10837851.64 0.0064 0.0025

Venus -34384-01-29 05:45 J -10837304.43 -10837304.26 -10837304.08 0.0065 0.0038

Venus -34384-09-11 09:50 J -10837079.31 -10837079.09 -10837078.87 0.0065 0.0002

Venus -34383-04-24 13:11 J -10836854.09 -10836853.95 -10836853.76 0.0065 0.0044

Moon -34379-05-21 04:33 J -10835366.55 -10835366.31 -10835366.04 0.0067 0.0006

Earth -34379-05-21 07:55 J -10835366.42 -10835366.17 -10835365.91 0.0067 0.0009 \*

Mercury -34377-01-24 19:26 J -10834752.73 -10834752.69 -10834752.62 0.0068 0.0064

Mercury -34377-04-21 20:52 J -10834664.71 -10834664.63 -10834664.54 0.0068 0.0058

Mercury -34377-07-18 22:04 J -10834576.67 -10834576.58 -10834576.46 0.0068 0.0052

Mercury -34377-10-14 23:31 J -10834488.63 -10834488.52 -10834488.39 0.0068 0.0046

Mercury -34376-01-11 00:57 J -10834400.59 -10834400.46 -10834400.32 0.0068 0.0041

Mercury -34376-04-09 02:23 J -10834312.54 -10834312.40 -10834312.26 0.0068 0.0035

Mercury -34376-07-06 03:35 J -10834224.50 -10834224.35 -10834224.19 0.0068 0.0029

Mercury -34376-10-02 05:02 J -10834136.45 -10834136.29 -10834136.13 0.0068 0.0023

Mercury -34376-12-29 06:14 J -10834048.39 -10834048.24 -10834048.07 0.0069 0.0017

Mercury -34375-03-27 07:40 J -10833960.34 -10833960.18 -10833960.01 0.0069 0.0011

Mercury -34375-06-23 09:07 J -10833872.28 -10833872.12 -10833871.95 0.0069 0.0005

Mercury -34375-09-19 10:33 J -10833784.22 -10833784.06 -10833783.89 0.0069 0.0003

Mercury -34375-12-16 11:59 J -10833696.16 -10833696.00 -10833695.83 0.0069 0.0009

Mercury -34374-03-14 13:26 J -10833608.10 -10833607.94 -10833607.77 0.0069 0.0015

Mercury -34374-06-10 14:52 J -10833520.04 -10833519.88 -10833519.72 0.0069 0.0021

Mercury -34374-09-06 16:19 J -10833431.97 -10833431.82 -10833431.66 0.0069 0.0028

Mercury -34374-12-03 17:31 J -10833343.90 -10833343.77 -10833343.61 0.0069 0.0035

Mercury -34373-02-29 19:11 J -10833255.83 -10833255.70 -10833255.56 0.0070 0.0041

Mercury -34373-05-27 20:23 J -10833167.75 -10833167.65 -10833167.51 0.0070 0.0048

Mercury -34373-08-23 21:50 J -10833079.67 -10833079.59 -10833079.46 0.0070 0.0055

Mercury -34373-11-19 23:31 J -10832991.59 -10832991.52 -10832991.43 0.0070 0.0061

Mercury -34372-02-16 00:57 J -10832903.48 -10832903.46 -10832903.40 0.0070 0.0068

Venus -34297-10-01 22:19 J -10805281.67 -10805281.57 -10805281.45 0.0079 0.0069

Venus -34296-05-15 08:52 J -10805056.36 -10805056.13 -10805055.91 0.0079 0.0007

Moon -34293-11-23 11:59 J -10803768.21 -10803768.00 -10803767.74 0.0077 0.0031

Earth -34293-11-23 15:21 J -10803768.08 -10803767.86 -10803767.60 0.0077 0.0029 \*

Mercury -34292-12-15 21:35 J -10803380.65 -10803380.60 -10803380.53 0.0076 0.0069

Mercury -34291-03-13 23:16 J -10803292.62 -10803292.53 -10803292.44 0.0076 0.0061

Mercury -34291-06-10 00:14 J -10803204.58 -10803204.49 -10803204.37 0.0076 0.0054

Mercury -34291-09-06 01:55 J -10803116.53 -10803116.42 -10803116.30 0.0076 0.0046

Mercury -34291-12-03 03:07 J -10803028.49 -10803028.37 -10803028.23 0.0076 0.0039

Mercury -34290-03-01 04:33 J -10802940.44 -10802940.31 -10802940.17 0.0076 0.0031

Mercury -34290-05-28 05:59 J -10802852.39 -10802852.25 -10802852.10 0.0075 0.0023

Mercury -34290-08-24 07:11 J -10802764.34 -10802764.20 -10802764.04 0.0075 0.0017

Mercury -34290-11-20 08:38 J -10802676.29 -10802676.14 -10802675.99 0.0075 0.0009

Mercury -34289-02-16 10:04 J -10802588.23 -10802588.08 -10802587.93 0.0075 0.0002

Mercury -34289-05-14 11:16 J -10802500.18 -10802500.03 -10802499.88 0.0075 0.0006

Mercury -34289-08-10 12:28 J -10802412.12 -10802411.98 -10802411.83 0.0075 0.0013

Mercury -34289-11-06 13:55 J -10802324.07 -10802323.92 -10802323.78 0.0075 0.0020

Mercury -34288-02-02 14:52 J -10802236.01 -10802235.88 -10802235.73 0.0075 0.0027

Mercury -34288-05-01 16:04 J -10802147.95 -10802147.83 -10802147.69 0.0074 0.0034

Mercury -34288-07-28 17:16 J -10802059.89 -10802059.78 -10802059.64 0.0074 0.0041

Mercury -34288-10-24 18:28 J -10801971.83 -10801971.73 -10801971.60 0.0074 0.0048

Mercury -34287-01-20 19:55 J -10801883.76 -10801883.67 -10801883.57 0.0074 0.0054

Mercury -34287-04-18 21:07 J -10801795.70 -10801795.62 -10801795.54 0.0074 0.0061

Mercury -34287-07-15 22:04 J -10801707.62 -10801707.58 -10801707.51 0.0074 0.0068

Venus -34136-08-14 06:14 J -10746525.38 -10746525.24 -10746525.05 0.0065 0.0041

Venus -34135-03-27 10:47 J -10746300.27 -10746300.05 -10746299.83 0.0065 0.0000

Venus -34135-11-07 14:23 J -10746075.05 -10746074.90 -10746074.71 0.0065 0.0041

Earth -34131-05-21 22:47 J -10744783.68 -10744783.55 -10744783.38 0.0067 0.0055  
 Moon -34131-05-22 00:43 J -10744783.60 -10744783.47 -10744783.30 0.0067 0.0055 \*  
 Earth -34130-05-23 13:40 J -10744417.14 -10744416.93 -10744416.67 0.0067 0.0030  
 Moon -34130-05-23 13:55 J -10744417.13 -10744416.92 -10744416.68 0.0067 0.0029 \*  
 Mercury -34129-11-10 02:09 J -10743880.44 -10743880.41 -10743880.36 0.0068 0.0065  
 Mercury -34128-02-06 03:07 J -10743792.43 -10743792.37 -10743792.27 0.0068 0.0060  
 Mercury -34128-05-05 04:33 J -10743704.39 -10743704.31 -10743704.19 0.0068 0.0054  
 Mercury -34128-08-01 05:45 J -10743616.36 -10743616.26 -10743616.12 0.0068 0.0049  
 Mercury -34128-10-28 07:11 J -10743528.31 -10743528.20 -10743528.05 0.0068 0.0042  
 Mercury -34127-01-24 08:38 J -10743440.27 -10743440.14 -10743439.99 0.0068 0.0036  
 Mercury -34127-04-22 09:50 J -10743352.22 -10743352.09 -10743351.92 0.0068 0.0031  
 Mercury -34127-07-19 11:16 J -10743264.17 -10743264.03 -10743263.86 0.0068 0.0025  
 Mercury -34127-10-15 12:57 J -10743176.12 -10743175.96 -10743175.80 0.0069 0.0018  
 Mercury -34126-01-11 14:23 J -10743088.07 -10743087.90 -10743087.74 0.0069 0.0012  
 Mercury -34126-04-09 15:50 J -10743000.01 -10742999.84 -10742999.67 0.0069 0.0006  
 Mercury -34126-07-06 17:16 J -10742911.95 -10742911.78 -10742911.62 0.0069 0.0002  
 Mercury -34126-10-02 18:28 J -10742823.89 -10742823.73 -10742823.56 0.0069 0.0007  
 Mercury -34126-12-29 19:55 J -10742735.83 -10742735.67 -10742735.50 0.0069 0.0014  
 Mercury -34125-03-26 21:21 J -10742647.77 -10742647.61 -10742647.44 0.0069 0.0020  
 Mercury -34125-06-22 22:47 J -10742559.70 -10742559.55 -10742559.39 0.0069 0.0027  
 Mercury -34125-09-18 23:59 J -10742471.63 -10742471.50 -10742471.33 0.0069 0.0034  
 Mercury -34125-12-16 01:40 J -10742383.56 -10742383.43 -10742383.28 0.0070 0.0040  
 Mercury -34124-03-14 02:52 J -10742295.49 -10742295.38 -10742295.23 0.0070 0.0047  
 Mercury -34124-06-10 04:47 J -10742207.41 -10742207.30 -10742207.19 0.0070 0.0053  
 Mercury -34124-09-06 05:59 J -10742119.32 -10742119.25 -10742119.15 0.0070 0.0060  
 Mercury -34124-12-03 07:26 J -10742031.22 -10742031.19 -10742031.12 0.0070 0.0067  
 Mars -34048-02-25 03:50 J -10714553.40 -10714553.34 -10714553.27 0.0079 0.0078  
 Venus -34048-11-28 06:14 J -10714277.46 -10714277.24 -10714277.01 0.0079 0.0005  
 Venus -34047-07-11 16:04 J -10714051.90 -10714051.83 -10714051.71 0.0079 0.0071  
 Earth -34045-11-23 22:33 J -10713185.65 -10713185.56 -10713185.43 0.0077 0.0070

Moon -34045-11-24 01:26 J -10713185.56 -10713185.44 -10713185.29 0.0077 0.0065 \*  
 Moon -34044-11-25 23:02 J -10712818.68 -10712818.54 -10712818.35 0.0077 0.0057  
 Earth -34044-11-25 23:59 J -10712818.64 -10712818.50 -10712818.32 0.0077 0.0060 \*  
 Mercury -34043-10-02 04:04 J -10712508.36 -10712508.33 -10712508.26 0.0076 0.0071  
 Mercury -34043-12-29 05:45 J -10712420.33 -10712420.26 -10712420.17 0.0076 0.0063  
 Mercury -34042-03-27 07:11 J -10712332.30 -10712332.20 -10712332.09 0.0076 0.0055  
 Mercury -34042-06-23 08:23 J -10712244.25 -10712244.15 -10712244.02 0.0076 0.0048  
 Mercury -34042-09-19 10:04 J -10712156.21 -10712156.08 -10712155.95 0.0076 0.0040  
 Mercury -34042-12-16 11:16 J -10712068.16 -10712068.03 -10712067.89 0.0076 0.0033  
 Mercury -34041-03-13 12:43 J -10711980.11 -10711979.97 -10711979.82 0.0075 0.0025  
 Mercury -34041-06-09 14:09 J -10711892.06 -10711891.91 -10711891.76 0.0075 0.0017  
 Mercury -34041-09-05 15:21 J -10711804.00 -10711803.86 -10711803.71 0.0075 0.0010  
 Mercury -34041-12-02 16:47 J -10711715.95 -10711715.80 -10711715.65 0.0075 0.0003  
 Mercury -34040-02-28 17:59 J -10711627.90 -10711627.75 -10711627.60 0.0075 0.0005  
 Mercury -34040-05-27 19:11 J -10711539.84 -10711539.70 -10711539.55 0.0075 0.0012  
 Mercury -34040-08-23 20:38 J -10711451.78 -10711451.64 -10711451.50 0.0075 0.0019  
 Mercury -34040-11-19 21:50 J -10711363.73 -10711363.59 -10711363.45 0.0074 0.0026  
 Mercury -34039-02-15 23:02 J -10711275.67 -10711275.54 -10711275.40 0.0074 0.0033  
 Mercury -34039-05-15 00:14 J -10711187.61 -10711187.49 -10711187.36 0.0074 0.0040  
 Mercury -34039-08-11 01:26 J -10711099.55 -10711099.44 -10711099.32 0.0074 0.0046  
 Mercury -34039-11-07 02:38 J -10711011.49 -10711011.39 -10711011.28 0.0074 0.0053  
 Mercury -34038-02-03 03:35 J -10710923.42 -10710923.35 -10710923.25 0.0074 0.0060  
 Mercury -34038-05-02 04:47 J -10710835.35 -10710835.30 -10710835.22 0.0074 0.0067  
 Mercury -34038-07-29 06:14 J -10710747.25 -10710747.24 -10710747.22 0.0074 0.0073

# 34TH MILLENNIUM BCE

# **This is a list of transits visible from Pluto in the 34th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-33887-02-27 09:35 J	-10655746.28	-10655746.10	-10655745.92	0.0065	0.0036		
Venus	-33887-10-10 13:26 J	-10655521.15	-10655520.94	-10655520.72	0.0065	0.0004		
Venus	-33886-05-23 16:47 J	-10655295.93	-10655295.80	-10655295.62	0.0065	0.0045		
Moon	-33882-05-24 07:11 J	-10653834.41	-10653834.20	-10653833.93	0.0067	0.0029		
Earth	-33882-05-24 08:38 J	-10653834.37	-10653834.14	-10653833.89	0.0067	0.0025	*	
Earth	-33881-05-24 23:45 J	-10653467.60	-10653467.51	-10653467.38	0.0067	0.0061		
Moon	-33881-05-25 02:23 J	-10653467.44	-10653467.40	-10653467.29	0.0067	0.0065	*	
Mercury	-33880-08-27 09:35 J	-10653008.14	-10653008.10	-10653008.04	0.0068	0.0064		
Mercury	-33880-11-23 11:02 J	-10652920.12	-10652920.04	-10652919.95	0.0068	0.0058		
Mercury	-33879-02-19 12:14 J	-10652832.09	-10652831.99	-10652831.88	0.0068	0.0053		
Mercury	-33879-05-18 13:40 J	-10652744.05	-10652743.93	-10652743.81	0.0068	0.0047		
Mercury	-33879-08-14 15:07 J	-10652656.01	-10652655.87	-10652655.74	0.0068	0.0041		
Mercury	-33879-11-10 16:19 J	-10652567.96	-10652567.82	-10652567.67	0.0068	0.0035		
Mercury	-33878-02-06 17:31 J	-10652479.91	-10652479.77	-10652479.61	0.0068	0.0029		
Mercury	-33878-05-05 18:57 J	-10652391.86	-10652391.71	-10652391.54	0.0069	0.0023		
Mercury	-33878-08-01 20:23 J	-10652303.81	-10652303.65	-10652303.48	0.0069	0.0017		
Mercury	-33878-10-28 21:50 J	-10652215.75	-10652215.59	-10652215.42	0.0069	0.0010		
Mercury	-33877-01-24 23:16 J	-10652127.70	-10652127.53	-10652127.36	0.0069	0.0004		
Mercury	-33877-04-22 00:43 J	-10652039.64	-10652039.47	-10652039.30	0.0069	0.0002		
Mercury	-33877-07-19 02:09 J	-10651951.58	-10651951.41	-10651951.24	0.0069	0.0009		
Mercury	-33877-10-15 03:35 J	-10651863.51	-10651863.35	-10651863.19	0.0069	0.0015		
Mercury	-33876-01-11 05:02 J	-10651775.45	-10651775.29	-10651775.13	0.0069	0.0022		
Mercury	-33876-04-09 06:14 J	-10651687.38	-10651687.24	-10651687.07	0.0069	0.0029		
Mercury	-33876-07-06 07:55 J	-10651599.31	-10651599.17	-10651599.02	0.0070	0.0035		
Mercury	-33876-10-02 09:07 J	-10651511.24	-10651511.12	-10651510.97	0.0070	0.0042		

Mercury -33876-12-29 10:33 J -10651423.16 -10651423.06 -10651422.92 0.0070 0.0049

Mercury -33875-03-27 12:14 J -10651335.08 -10651334.99 -10651334.88 0.0070 0.0055

Mercury -33875-06-23 13:40 J -10651246.99 -10651246.93 -10651246.84 0.0070 0.0062

Mercury -33875-09-19 15:07 J -10651158.88 -10651158.87 -10651158.82 0.0070 0.0069

Mars -33800-06-02 20:38 J -10623873.97 -10623873.64 -10623873.29 0.0079 0.0007

Venus -33800-10-30 20:38 J -10623723.66 -10623723.64 -10623723.56 0.0079 0.0078

Venus -33799-06-13 07:40 J -10623498.40 -10623498.18 -10623497.95 0.0079 0.0002

Venus -33798-01-24 17:45 J -10623272.82 -10623272.76 -10623272.67 0.0079 0.0074

Moon -33796-11-26 13:26 J -10622236.20 -10622235.94 -10622235.68 0.0077 0.0020

Earth -33796-11-26 13:40 J -10622236.17 -10622235.93 -10622235.68 0.0077 0.0022 \*

Mercury -33794-07-19 12:28 J -10621636.04 -10621635.98 -10621635.92 0.0076 0.0068

Mercury -33794-10-15 13:26 J -10621548.01 -10621547.94 -10621547.83 0.0076 0.0061

Mercury -33793-01-11 15:07 J -10621459.97 -10621459.87 -10621459.76 0.0076 0.0053

Mercury -33793-04-08 16:19 J -10621371.93 -10621371.82 -10621371.69 0.0076 0.0046

Mercury -33793-07-05 17:45 J -10621283.88 -10621283.76 -10621283.62 0.0076 0.0038

Mercury -33793-10-01 19:11 J -10621195.83 -10621195.70 -10621195.56 0.0075 0.0030

Mercury -33793-12-28 20:38 J -10621107.78 -10621107.64 -10621107.49 0.0075 0.0023

Mercury -33792-03-26 21:50 J -10621019.73 -10621019.59 -10621019.44 0.0075 0.0016

Mercury -33792-06-22 23:16 J -10620931.68 -10620931.53 -10620931.38 0.0075 0.0008

Mercury -33792-09-19 00:43 J -10620843.62 -10620843.47 -10620843.32 0.0075 0.0002

Mercury -33792-12-16 01:55 J -10620755.57 -10620755.42 -10620755.27 0.0075 0.0007

Mercury -33791-03-14 03:07 J -10620667.51 -10620667.37 -10620667.22 0.0075 0.0014

Mercury -33791-06-10 04:19 J -10620579.46 -10620579.32 -10620579.17 0.0074 0.0021

Mercury -33791-09-06 05:45 J -10620491.40 -10620491.26 -10620491.12 0.0074 0.0028

Mercury -33791-12-03 06:57 J -10620403.34 -10620403.21 -10620403.08 0.0074 0.0035

Mercury -33790-03-01 08:09 J -10620315.28 -10620315.16 -10620315.04 0.0074 0.0042

Mercury -33790-05-28 09:21 J -10620227.22 -10620227.11 -10620227.00 0.0074 0.0048

Mercury -33790-08-24 10:19 J -10620139.16 -10620139.07 -10620138.96 0.0074 0.0055

Mercury -33790-11-20 11:31 J -10620051.09 -10620051.02 -10620050.93 0.0074 0.0062

Mercury -33789-02-16 12:28 J -10619963.01 -10619962.98 -10619962.91 0.0074 0.0069

Mars -33639-04-14 10:04 J -10565118.20 -10565118.08 -10565117.89 0.0065 0.0055  
 Venus -33639-09-12 11:59 J -10564967.18 -10564967.00 -10564966.81 0.0065 0.0033  
 Venus -33638-04-25 15:50 J -10564742.05 -10564741.84 -10564741.62 0.0065 0.0007  
 Venus -33638-12-06 19:40 J -10564516.82 -10564516.68 -10564516.53 0.0065 0.0048  
 Moon -33633-05-25 14:38 J -10562885.15 -10562884.89 -10562884.62 0.0067 0.0003  
 Earth -33633-05-25 17:59 J -10562885.00 -10562884.75 -10562884.48 0.0067 0.0003 \*  
 Mercury -33631-06-13 16:33 J -10562135.84 -10562135.81 -10562135.73 0.0068 0.0064  
 Mercury -33631-09-09 17:59 J -10562047.82 -10562047.75 -10562047.65 0.0068 0.0058  
 Mercury -33631-12-06 19:26 J -10561959.78 -10561959.69 -10561959.57 0.0068 0.0052  
 Mercury -33630-03-04 20:38 J -10561871.74 -10561871.64 -10561871.50 0.0068 0.0047  
 Mercury -33630-05-31 22:04 J -10561783.70 -10561783.58 -10561783.43 0.0068 0.0040  
 Mercury -33630-08-27 23:31 J -10561695.65 -10561695.52 -10561695.37 0.0068 0.0034  
 Mercury -33630-11-24 01:11 J -10561607.60 -10561607.45 -10561607.30 0.0069 0.0028  
 Mercury -33629-02-20 02:23 J -10561519.55 -10561519.40 -10561519.24 0.0069 0.0022  
 Mercury -33629-05-18 03:50 J -10561431.50 -10561431.34 -10561431.17 0.0069 0.0016  
 Mercury -33629-08-14 05:16 J -10561343.45 -10561343.28 -10561343.11 0.0069 0.0009  
 Mercury -33629-11-10 06:43 J -10561255.39 -10561255.22 -10561255.05 0.0069 0.0003  
 Mercury -33628-02-06 08:09 J -10561167.33 -10561167.16 -10561166.99 0.0069 0.0003  
 Mercury -33628-05-05 09:21 J -10561079.27 -10561079.11 -10561078.94 0.0069 0.0010  
 Mercury -33628-08-01 10:47 J -10560991.21 -10560991.05 -10560990.88 0.0069 0.0017  
 Mercury -33628-10-28 12:28 J -10560903.14 -10560902.98 -10560902.82 0.0069 0.0023  
 Mercury -33627-01-24 13:40 J -10560815.07 -10560814.93 -10560814.77 0.0070 0.0030  
 Mercury -33627-04-22 15:21 J -10560727.00 -10560726.86 -10560726.71 0.0070 0.0036  
 Mercury -33627-07-19 16:33 J -10560638.93 -10560638.81 -10560638.66 0.0070 0.0043  
 Mercury -33627-10-15 17:59 J -10560550.85 -10560550.75 -10560550.62 0.0070 0.0050  
 Mercury -33626-01-11 19:55 J -10560462.77 -10560462.67 -10560462.57 0.0070 0.0056  
 Mercury -33626-04-09 21:07 J -10560374.68 -10560374.62 -10560374.54 0.0070 0.0064  
 Venus -33551-05-15 21:50 J -10532944.64 -10532944.59 -10532944.51 0.0079 0.0076  
 Venus -33551-12-27 08:38 J -10532719.37 -10532719.14 -10532718.92 0.0079 0.0001  
 Venus -33550-08-09 18:14 J -10532493.77 -10532493.74 -10532493.65 0.0079 0.0076



Moon -33547-11-28 23:31 J -10531286.76 -10531286.52 -10531286.25 0.0077 0.0021  
 Earth -33547-11-29 02:52 J -10531286.61 -10531286.38 -10531286.12 0.0077 0.0024 \*  
 Mercury -33545-02-06 18:28 J -10530851.75 -10530851.73 -10530851.69 0.0076 0.0074  
 Mercury -33545-05-04 20:09 J -10530763.73 -10530763.66 -10530763.59 0.0076 0.0066  
 Mercury -33545-07-31 21:07 J -10530675.70 -10530675.62 -10530675.51 0.0076 0.0059  
 Mercury -33545-10-27 22:47 J -10530587.65 -10530587.55 -10530587.43 0.0076 0.0051  
 Mercury -33544-01-23 23:59 J -10530499.61 -10530499.50 -10530499.36 0.0076 0.0044  
 Mercury -33544-04-22 01:26 J -10530411.56 -10530411.44 -10530411.30 0.0075 0.0036  
 Mercury -33544-07-19 02:52 J -10530323.51 -10530323.38 -10530323.23 0.0075 0.0028  
 Mercury -33544-10-15 04:19 J -10530235.46 -10530235.32 -10530235.17 0.0075 0.0021  
 Mercury -33543-01-11 05:31 J -10530147.41 -10530147.27 -10530147.12 0.0075 0.0013  
 Mercury -33543-04-09 06:57 J -10530059.36 -10530059.21 -10530059.06 0.0075 0.0006  
 Mercury -33543-07-06 08:09 J -10529971.30 -10529971.16 -10529971.01 0.0075 0.0003  
 Mercury -33543-10-02 09:35 J -10529883.25 -10529883.10 -10529882.95 0.0075 0.0009  
 Mercury -33543-12-29 10:47 J -10529795.20 -10529795.05 -10529794.90 0.0074 0.0016  
 Mercury -33542-03-27 11:59 J -10529707.14 -10529707.00 -10529706.86 0.0074 0.0023  
 Mercury -33542-06-23 12:57 J -10529619.08 -10529618.96 -10529618.81 0.0074 0.0031  
 Mercury -33542-09-19 14:38 J -10529531.02 -10529530.89 -10529530.76 0.0074 0.0037  
 Mercury -33542-12-16 15:50 J -10529442.96 -10529442.84 -10529442.72 0.0074 0.0043  
 Mercury -33541-03-13 16:47 J -10529354.90 -10529354.80 -10529354.68 0.0074 0.0050  
 Mercury -33541-06-09 17:59 J -10529266.83 -10529266.75 -10529266.65 0.0074 0.0057  
 Mercury -33541-09-05 18:57 J -10529178.76 -10529178.71 -10529178.62 0.0074 0.0064  
 Mercury -33541-12-02 20:09 J -10529090.68 -10529090.66 -10529090.60 0.0073 0.0070  
 Mars -33391-07-22 17:31 J -10474437.04 -10474436.77 -10474436.49 0.0065 0.0025  
 Venus -33391-08-15 11:59 J -10474413.02 -10474413.00 -10474412.92 0.0065 0.0063  
 Venus -33390-03-28 16:19 J -10474188.01 -10474187.82 -10474187.61 0.0065 0.0023  
 Venus -33390-11-08 20:23 J -10473962.86 -10473962.65 -10473962.44 0.0065 0.0017  
 Venus -33389-06-20 23:45 J -10473737.58 -10473737.51 -10473737.39 0.0065 0.0059  
 Earth -33385-05-26 15:07 J -10472302.04 -10472301.87 -10472301.65 0.0067 0.0044  
 Moon -33385-05-26 19:11 J -10472301.87 -10472301.70 -10472301.50 0.0067 0.0047 \*

Moon -33384-05-28 04:19 J -10471935.49 -10471935.32 -10471935.12 0.0067 0.0046  
 Earth -33384-05-28 06:43 J -10471935.40 -10471935.22 -10471935.00 0.0067 0.0043 \*  
 Mercury -33382-01-01 23:45 J -10471351.53 -10471351.51 -10471351.46 0.0068 0.0066  
 Mercury -33382-03-31 00:57 J -10471263.52 -10471263.46 -10471263.36 0.0068 0.0061  
 Mercury -33382-06-27 02:23 J -10471175.48 -10471175.40 -10471175.29 0.0068 0.0054  
 Mercury -33382-09-23 03:50 J -10471087.45 -10471087.34 -10471087.21 0.0068 0.0048  
 Mercury -33382-12-20 05:02 J -10470999.40 -10470999.29 -10470999.15 0.0068 0.0043  
 Mercury -33381-03-17 06:28 J -10470911.36 -10470911.23 -10470911.08 0.0069 0.0036  
 Mercury -33381-06-13 08:09 J -10470823.31 -10470823.16 -10470823.01 0.0069 0.0030  
 Mercury -33381-09-09 09:21 J -10470735.26 -10470735.11 -10470734.95 0.0069 0.0024  
 Mercury -33381-12-06 10:47 J -10470647.21 -10470647.05 -10470646.89 0.0069 0.0018  
 Mercury -33380-03-04 11:59 J -10470559.15 -10470559.00 -10470558.82 0.0069 0.0012  
 Mercury -33380-05-31 13:40 J -10470471.10 -10470470.93 -10470470.76 0.0069 0.0005  
 Mercury -33380-08-27 15:07 J -10470383.04 -10470382.87 -10470382.70 0.0069 0.0001  
 Mercury -33380-11-23 16:33 J -10470294.98 -10470294.81 -10470294.64 0.0069 0.0008  
 Mercury -33379-02-19 17:45 J -10470206.91 -10470206.76 -10470206.59 0.0069 0.0015  
 Mercury -33379-05-18 19:26 J -10470118.85 -10470118.69 -10470118.53 0.0070 0.0021  
 Mercury -33379-08-14 20:38 J -10470030.78 -10470030.64 -10470030.47 0.0070 0.0028  
 Mercury -33379-11-10 22:19 J -10469942.71 -10469942.57 -10469942.42 0.0070 0.0034  
 Mercury -33378-02-06 23:31 J -10469854.64 -10469854.52 -10469854.37 0.0070 0.0041  
 Mercury -33378-05-06 00:57 J -10469766.56 -10469766.46 -10469766.32 0.0070 0.0048  
 Mercury -33378-08-02 02:52 J -10469678.48 -10469678.38 -10469678.27 0.0070 0.0055  
 Mercury -33378-10-29 04:19 J -10469590.39 -10469590.32 -10469590.23 0.0070 0.0061  
 Mercury -33377-01-25 05:45 J -10469502.29 -10469502.26 -10469502.21 0.0070 0.0069  
 Venus -33303-11-29 01:55 J -10442165.55 -10442165.42 -10442165.25 0.0079 0.0059  
 Venus -33302-07-12 12:43 J -10441940.18 -10441939.97 -10441939.74 0.0079 0.0017  
 Earth -33299-11-29 20:23 J -10440703.84 -10440703.65 -10440703.42 0.0077 0.0045  
 Moon -33299-11-29 23:45 J -10440703.69 -10440703.51 -10440703.27 0.0077 0.0044 \*  
 Mercury -33297-11-23 03:35 J -10439979.41 -10439979.35 -10439979.28 0.0076 0.0068  
 Mercury -33296-02-19 04:33 J -10439891.38 -10439891.31 -10439891.20 0.0076 0.0061

Mercury -33296-05-18 06:14 J -10439803.34 -10439803.24 -10439803.13 0.0076 0.0053

Mercury -33296-08-14 07:26 J -10439715.30 -10439715.19 -10439715.06 0.0075 0.0046

Mercury -33296-11-10 08:52 J -10439627.25 -10439627.13 -10439626.99 0.0075 0.0038

Mercury -33295-02-06 10:19 J -10439539.20 -10439539.07 -10439538.93 0.0075 0.0030

Mercury -33295-05-05 11:45 J -10439451.15 -10439451.01 -10439450.87 0.0075 0.0022

Mercury -33295-08-01 12:57 J -10439363.10 -10439362.96 -10439362.81 0.0075 0.0015

Mercury -33295-10-28 14:23 J -10439275.05 -10439274.90 -10439274.75 0.0075 0.0008

Mercury -33294-01-24 15:35 J -10439187.00 -10439186.85 -10439186.70 0.0075 0.0002

Mercury -33294-04-22 17:02 J -10439098.94 -10439098.79 -10439098.64 0.0075 0.0007

Mercury -33294-07-19 18:14 J -10439010.89 -10439010.74 -10439010.59 0.0074 0.0014

Mercury -33294-10-15 19:11 J -10438922.83 -10438922.70 -10438922.54 0.0074 0.0022

Mercury -33293-01-11 20:38 J -10438834.77 -10438834.64 -10438834.50 0.0074 0.0028

Mercury -33293-04-08 21:50 J -10438746.71 -10438746.59 -10438746.45 0.0074 0.0035

Mercury -33293-07-05 22:47 J -10438658.65 -10438658.55 -10438658.41 0.0074 0.0042

Mercury -33293-10-01 23:59 J -10438570.59 -10438570.50 -10438570.37 0.0074 0.0049

Mercury -33293-12-29 01:26 J -10438482.53 -10438482.44 -10438482.34 0.0074 0.0055

Mercury -33292-03-27 02:38 J -10438394.46 -10438394.39 -10438394.30 0.0074 0.0062

Mercury -33292-06-23 03:35 J -10438306.39 -10438306.35 -10438306.28 0.0073 0.0069

Mars -33143-10-29 23:59 J -10383755.79 -10383755.50 -10383755.20 0.0064 0.0007

Venus -33142-02-28 16:19 J -10383633.92 -10383633.82 -10383633.68 0.0065 0.0054

Venus -33142-10-11 20:38 J -10383408.85 -10383408.64 -10383408.43 0.0065 0.0014

Venus -33141-05-24 00:14 J -10383183.68 -10383183.49 -10383183.28 0.0065 0.0026

Earth -33136-05-29 04:04 J -10381352.58 -10381352.33 -10381352.06 0.0067 0.0007

Moon -33136-05-29 05:59 J -10381352.51 -10381352.25 -10381351.97 0.0067 0.0007 \*

Mercury -33134-10-19 07:55 J -10380479.21 -10380479.17 -10380479.09 0.0068 0.0063

Mercury -33133-01-15 09:07 J -10380391.19 -10380391.12 -10380391.01 0.0068 0.0058

Mercury -33133-04-12 10:33 J -10380303.15 -10380303.06 -10380302.94 0.0068 0.0051

Mercury -33133-07-09 11:45 J -10380215.11 -10380215.01 -10380214.87 0.0068 0.0046

Mercury -33133-10-05 13:11 J -10380127.07 -10380126.95 -10380126.80 0.0069 0.0040

Mercury -33132-01-01 14:52 J -10380039.02 -10380038.88 -10380038.73 0.0069 0.0033

Mercury -33132-03-30 16:04 J -10379950.97 -10379950.83 -10379950.67 0.0069 0.0027

Mercury -33132-06-26 17:31 J -10379862.92 -10379862.77 -10379862.60 0.0069 0.0021

Mercury -33132-09-22 19:11 J -10379774.87 -10379774.70 -10379774.54 0.0069 0.0014

Mercury -33132-12-19 20:23 J -10379686.81 -10379686.65 -10379686.48 0.0069 0.0008

Mercury -33131-03-17 21:50 J -10379598.75 -10379598.59 -10379598.42 0.0069 0.0002

Mercury -33131-06-13 23:16 J -10379510.69 -10379510.53 -10379510.36 0.0069 0.0005

Mercury -33131-09-10 00:43 J -10379422.63 -10379422.47 -10379422.30 0.0069 0.0011

Mercury -33131-12-07 01:55 J -10379334.57 -10379334.42 -10379334.24 0.0070 0.0019

Mercury -33130-03-05 03:35 J -10379246.50 -10379246.35 -10379246.19 0.0070 0.0025

Mercury -33130-06-01 04:47 J -10379158.43 -10379158.30 -10379158.13 0.0070 0.0032

Mercury -33130-08-28 06:28 J -10379070.36 -10379070.23 -10379070.08 0.0070 0.0038

Mercury -33130-11-24 07:55 J -10378982.29 -10378982.17 -10378982.03 0.0070 0.0045

Mercury -33129-02-20 09:21 J -10378894.21 -10378894.11 -10378893.98 0.0070 0.0052

Mercury -33129-05-18 11:16 J -10378806.12 -10378806.03 -10378805.94 0.0070 0.0059

Mercury -33129-08-14 12:43 J -10378718.02 -10378717.97 -10378717.91 0.0070 0.0066

Venus -33054-06-14 05:59 J -10351386.41 -10351386.25 -10351386.04 0.0079 0.0044

Venus -33053-01-25 16:47 J -10351161.00 -10351160.80 -10351160.59 0.0079 0.0032

Earth -33050-12-02 15:07 J -10349754.11 -10349753.87 -10349753.61 0.0077 0.0016

Moon -33050-12-02 17:31 J -10349754.03 -10349753.77 -10349753.50 0.0077 0.0013 \*

Mercury -33048-06-13 11:02 J -10349195.10 -10349195.04 -10349194.99 0.0076 0.0070

Mercury -33048-09-09 11:59 J -10349107.07 -10349107.00 -10349106.90 0.0076 0.0063

Mercury -33048-12-06 13:26 J -10349019.03 -10349018.94 -10349018.83 0.0076 0.0055

Mercury -33047-03-04 14:38 J -10348930.99 -10348930.89 -10348930.75 0.0075 0.0048

Mercury -33047-05-31 16:19 J -10348842.94 -10348842.82 -10348842.69 0.0075 0.0039

Mercury -33047-08-27 17:31 J -10348754.90 -10348754.77 -10348754.62 0.0075 0.0032

Mercury -33047-11-23 18:57 J -10348666.85 -10348666.71 -10348666.56 0.0075 0.0024

Mercury -33046-02-19 20:23 J -10348578.80 -10348578.65 -10348578.50 0.0075 0.0017

Mercury -33046-05-18 21:35 J -10348490.74 -10348490.60 -10348490.45 0.0075 0.0010

Mercury -33046-08-14 23:02 J -10348402.69 -10348402.54 -10348402.39 0.0075 0.0002

Mercury -33046-11-11 00:14 J -10348314.64 -10348314.49 -10348314.34 0.0075 0.0005

Mercury -33045-02-07 01:26 J -10348226.58 -10348226.44 -10348226.29 0.0074 0.0012

Mercury -33045-05-05 02:38 J -10348138.53 -10348138.39 -10348138.24 0.0074 0.0019

Mercury -33045-08-01 03:50 J -10348050.47 -10348050.34 -10348050.19 0.0074 0.0026

Mercury -33045-10-28 05:02 J -10347962.41 -10347962.29 -10347962.15 0.0074 0.0033

Mercury -33044-01-24 06:14 J -10347874.35 -10347874.24 -10347874.10 0.0074 0.0040

Mercury -33044-04-22 07:26 J -10347786.29 -10347786.19 -10347786.06 0.0074 0.0047

Mercury -33044-07-19 08:38 J -10347698.23 -10347698.14 -10347698.03 0.0074 0.0054

Mercury -33044-10-15 09:35 J -10347610.16 -10347610.10 -10347609.99 0.0074 0.0061

Mercury -33043-01-11 11:02 J -10347522.09 -10347522.04 -10347521.97 0.0073 0.0067

Mercury -33043-04-09 12:28 J -10347433.98 -10347433.98 -10347433.98 0.0073 0.0073

# 33RD MILLENNIUM BCE

This is a list of transits visible from Pluto in the 33rd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	-32894-02-06 11:45 J	-10293074.27	-10293074.01	-10293073.72	0.0064	0.0027		
Venus	-32894-09-13 22:33 J	-10292854.72	-10292854.56	-10292854.37	0.0065	0.0038		
Venus	-32893-04-26 02:52 J	-10292629.60	-10292629.38	-10292629.17	0.0065	0.0002		
Venus	-32893-12-07 06:28 J	-10292404.39	-10292404.23	-10292404.06	0.0065	0.0043		
Earth	-32888-05-30 04:19 J	-10290769.48	-10290769.32	-10290769.10	0.0067	0.0046		
Moon	-32888-05-30 04:47 J	-10290769.47	-10290769.30	-10290769.13	0.0067	0.0049	*	
Moon	-32887-05-31 18:28 J	-10290402.93	-10290402.73	-10290402.52	0.0067	0.0044		
Earth	-32887-05-31 20:09 J	-10290402.86	-10290402.66	-10290402.45	0.0067	0.0041	*	

Mercury -32885-05-08 15:35 J -10289694.89 -10289694.85 -10289694.77 0.0068 0.0063

Mercury -32885-08-04 16:47 J -10289606.87 -10289606.80 -10289606.69 0.0068 0.0058

Mercury -32885-10-31 18:14 J -10289518.83 -10289518.74 -10289518.61 0.0068 0.0052

Mercury -32884-01-27 19:40 J -10289430.79 -10289430.68 -10289430.54 0.0069 0.0045

Mercury -32884-04-25 21:21 J -10289342.75 -10289342.61 -10289342.47 0.0069 0.0039

Mercury -32884-07-22 22:33 J -10289254.70 -10289254.56 -10289254.41 0.0069 0.0033

Mercury -32884-10-18 23:45 J -10289166.65 -10289166.51 -10289166.34 0.0069 0.0027

Mercury -32883-01-15 01:26 J -10289078.60 -10289078.44 -10289078.28 0.0069 0.0020

Mercury -32883-04-13 02:52 J -10288990.54 -10288990.38 -10288990.22 0.0069 0.0014

Mercury -32883-07-10 04:19 J -10288902.49 -10288902.32 -10288902.15 0.0069 0.0008

Mercury -32883-10-06 05:45 J -10288814.43 -10288814.26 -10288814.09 0.0069 0.0001

Mercury -32882-01-02 07:11 J -10288726.37 -10288726.20 -10288726.03 0.0069 0.0005

Mercury -32882-03-31 08:38 J -10288638.31 -10288638.14 -10288637.98 0.0070 0.0012

Mercury -32882-06-27 09:50 J -10288550.24 -10288550.09 -10288549.92 0.0070 0.0019

Mercury -32882-09-23 11:31 J -10288462.18 -10288462.02 -10288461.86 0.0070 0.0025

Mercury -32882-12-20 12:43 J -10288374.11 -10288373.97 -10288373.81 0.0070 0.0032

Mercury -32881-03-17 14:09 J -10288286.03 -10288285.91 -10288285.75 0.0070 0.0039

Mercury -32881-06-13 16:04 J -10288197.96 -10288197.83 -10288197.70 0.0070 0.0046

Mercury -32881-09-09 17:16 J -10288109.88 -10288109.78 -10288109.66 0.0070 0.0053

Mercury -32881-12-06 18:43 J -10288021.79 -10288021.72 -10288021.61 0.0070 0.0060

Mercury -32880-03-04 20:23 J -10287933.69 -10287933.65 -10287933.59 0.0070 0.0067

Venus -32806-12-28 13:11 J -10260607.16 -10260606.95 -10260606.72 0.0079 0.0016

Venus -32805-08-09 23:31 J -10260381.65 -10260381.52 -10260381.36 0.0079 0.0059

Moon -32802-12-03 11:16 J -10259171.23 -10259171.03 -10259170.80 0.0077 0.0039

Earth -32802-12-03 12:14 J -10259171.18 -10259170.99 -10259170.74 0.0077 0.0041 \*

Mercury -32799-01-01 18:43 J -10258410.76 -10258410.72 -10258410.64 0.0076 0.0070

Mercury -32799-03-30 20:09 J -10258322.73 -10258322.66 -10258322.56 0.0076 0.0062

Mercury -32799-06-26 21:50 J -10258234.69 -10258234.59 -10258234.48 0.0075 0.0054

Mercury -32799-09-22 23:02 J -10258146.65 -10258146.54 -10258146.41 0.0075 0.0046

Mercury -32799-12-20 00:28 J -10258058.60 -10258058.48 -10258058.34 0.0075 0.0039

Mercury -32798-03-18 01:40 J -10257970.55 -10257970.43 -10257970.28 0.0075 0.0031

Mercury -32798-06-14 03:21 J -10257882.51 -10257882.36 -10257882.22 0.0075 0.0023

Mercury -32798-09-10 04:33 J -10257794.46 -10257794.31 -10257794.16 0.0075 0.0016

Mercury -32798-12-07 05:45 J -10257706.40 -10257706.26 -10257706.11 0.0075 0.0009

Mercury -32797-03-04 07:11 J -10257618.35 -10257618.20 -10257618.05 0.0075 0.0001

Mercury -32797-05-31 08:23 J -10257530.30 -10257530.15 -10257530.00 0.0074 0.0006

Mercury -32797-08-27 09:35 J -10257442.24 -10257442.10 -10257441.95 0.0074 0.0013

Mercury -32797-11-23 10:47 J -10257354.19 -10257354.05 -10257353.90 0.0074 0.0020

Mercury -32796-02-19 11:59 J -10257266.13 -10257266.00 -10257265.85 0.0074 0.0027

Mercury -32796-05-18 13:11 J -10257178.07 -10257177.95 -10257177.81 0.0074 0.0034

Mercury -32796-08-14 14:23 J -10257090.01 -10257089.90 -10257089.77 0.0074 0.0041

Mercury -32796-11-10 15:35 J -10257001.95 -10257001.85 -10257001.73 0.0074 0.0048

Mercury -32795-02-06 16:47 J -10256913.89 -10256913.80 -10256913.69 0.0074 0.0054

Mercury -32795-05-05 18:14 J -10256825.82 -10256825.74 -10256825.66 0.0073 0.0061

Mercury -32795-08-01 19:11 J -10256737.75 -10256737.70 -10256737.63 0.0073 0.0068

Mars -32646-05-16 21:07 J -10202392.80 -10202392.62 -10202392.40 0.0064 0.0048

Venus -32646-08-16 23:59 J -10202300.52 -10202300.50 -10202300.42 0.0065 0.0063

Venus -32645-03-29 04:33 J -10202075.51 -10202075.31 -10202075.10 0.0065 0.0023

Venus -32645-11-09 08:23 J -10201850.35 -10201850.15 -10201849.93 0.0065 0.0017

Venus -32644-06-22 12:14 J -10201625.08 -10201624.99 -10201624.88 0.0065 0.0058

Earth -32639-06-01 20:23 J -10199819.91 -10199819.65 -10199819.39 0.0067 0.0000

Moon -32639-06-01 22:47 J -10199819.80 -10199819.55 -10199819.30 0.0067 0.0000 \*

Mercury -32637-11-26 23:31 J -10198910.57 -10198910.52 -10198910.45 0.0068 0.0064

Mercury -32636-02-23 00:43 J -10198822.54 -10198822.47 -10198822.37 0.0068 0.0058

Mercury -32636-05-22 01:55 J -10198734.51 -10198734.42 -10198734.29 0.0069 0.0052

Mercury -32636-08-18 03:21 J -10198646.47 -10198646.36 -10198646.22 0.0069 0.0046

Mercury -32636-11-14 04:33 J -10198558.42 -10198558.31 -10198558.15 0.0069 0.0040

Mercury -32635-02-10 06:14 J -10198470.38 -10198470.24 -10198470.09 0.0069 0.0033

Mercury -32635-05-09 07:40 J -10198382.33 -10198382.18 -10198382.02 0.0069 0.0027

Mercury -32635-08-05 08:52 J -10198294.28 -10198294.13 -10198293.96 0.0069 0.0021

Mercury -32635-11-01 10:33 J -10198206.22 -10198206.06 -10198205.90 0.0069 0.0014  
 Mercury -32634-01-28 11:59 J -10198118.17 -10198118.00 -10198117.83 0.0069 0.0008  
 Mercury -32634-04-26 13:26 J -10198030.11 -10198029.94 -10198029.77 0.0069 0.0001  
 Mercury -32634-07-23 14:52 J -10197942.05 -10197941.88 -10197941.71 0.0069 0.0005  
 Mercury -32634-10-19 16:19 J -10197853.99 -10197853.82 -10197853.65 0.0070 0.0012  
 Mercury -32633-01-15 17:31 J -10197765.92 -10197765.77 -10197765.60 0.0070 0.0019  
 Mercury -32633-04-12 19:11 J -10197677.85 -10197677.70 -10197677.54 0.0070 0.0025  
 Mercury -32633-07-09 20:23 J -10197589.78 -10197589.65 -10197589.48 0.0070 0.0032  
 Mercury -32633-10-05 21:50 J -10197501.71 -10197501.59 -10197501.43 0.0070 0.0039  
 Mercury -32632-01-01 23:45 J -10197413.64 -10197413.51 -10197413.38 0.0070 0.0046  
 Mercury -32632-03-31 01:11 J -10197325.56 -10197325.45 -10197325.33 0.0070 0.0053  
 Mercury -32632-06-27 02:38 J -10197237.47 -10197237.39 -10197237.29 0.0070 0.0060  
 Mercury -32632-09-23 04:04 J -10197149.37 -10197149.33 -10197149.26 0.0071 0.0067  
 Venus -32558-11-30 09:35 J -10170053.22 -10170053.10 -10170052.96 0.0079 0.0065  
 Venus -32557-07-12 20:23 J -10169827.87 -10169827.65 -10169827.43 0.0079 0.0011  
 Earth -32553-12-05 11:31 J -10168221.23 -10168221.02 -10168220.77 0.0077 0.0035  
 Moon -32553-12-05 12:57 J -10168221.17 -10168220.96 -10168220.71 0.0077 0.0032 \*  
 Mercury -32551-04-26 01:55 J -10167714.42 -10167714.42 -10167714.41 0.0076 0.0076  
 Mercury -32551-07-23 03:21 J -10167626.42 -10167626.36 -10167626.29 0.0076 0.0068  
 Mercury -32551-10-19 04:47 J -10167538.39 -10167538.30 -10167538.21 0.0076 0.0060  
 Mercury -32550-01-15 05:59 J -10167450.35 -10167450.25 -10167450.13 0.0075 0.0052  
 Mercury -32550-04-13 07:26 J -10167362.31 -10167362.19 -10167362.07 0.0075 0.0045  
 Mercury -32550-07-10 08:38 J -10167274.26 -10167274.14 -10167274.00 0.0075 0.0037  
 Mercury -32550-10-06 10:19 J -10167186.21 -10167186.07 -10167185.94 0.0075 0.0029  
 Mercury -32549-01-02 11:31 J -10167098.16 -10167098.02 -10167097.88 0.0075 0.0022  
 Mercury -32549-03-30 12:43 J -10167010.11 -10167009.97 -10167009.82 0.0075 0.0015  
 Mercury -32549-06-26 14:09 J -10166922.06 -10166921.91 -10166921.76 0.0075 0.0007  
 Mercury -32549-09-22 15:21 J -10166834.01 -10166833.86 -10166833.71 0.0074 0.0001  
 Mercury -32549-12-19 16:33 J -10166745.95 -10166745.81 -10166745.66 0.0074 0.0008  
 Mercury -32548-03-17 17:45 J -10166657.90 -10166657.76 -10166657.61 0.0074 0.0015



Mercury -32548-06-13 19:11 J -10166569.84 -10166569.70 -10166569.56 0.0074 0.0021  
 Mercury -32548-09-09 20:23 J -10166481.79 -10166481.65 -10166481.51 0.0074 0.0028  
 Mercury -32548-12-06 21:35 J -10166393.73 -10166393.60 -10166393.47 0.0074 0.0035  
 Mercury -32547-03-04 22:47 J -10166305.67 -10166305.55 -10166305.43 0.0074 0.0042  
 Mercury -32547-05-31 23:59 J -10166217.61 -10166217.50 -10166217.39 0.0074 0.0049  
 Mercury -32547-08-28 00:57 J -10166129.54 -10166129.46 -10166129.35 0.0073 0.0056  
 Mercury -32547-11-24 02:09 J -10166041.48 -10166041.41 -10166041.32 0.0073 0.0062  
 Mercury -32546-02-20 03:07 J -10165953.40 -10165953.37 -10165953.30 0.0073 0.0069  
 Mars -32398-08-24 12:43 J -10111711.10 -10111710.97 -10111710.80 0.0064 0.0056  
 Venus -32397-03-01 08:09 J -10111521.30 -10111521.16 -10111520.96 0.0065 0.0041  
 Venus -32397-10-12 12:43 J -10111296.19 -10111295.97 -10111295.75 0.0065 0.0001  
 Venus -32396-05-25 15:50 J -10111070.98 -10111070.84 -10111070.64 0.0065 0.0041  
 Moon -32391-06-02 21:21 J -10109236.84 -10109236.61 -10109236.38 0.0067 0.0034  
 Earth -32391-06-03 00:14 J -10109236.70 -10109236.49 -10109236.24 0.0067 0.0031 \*  
 Earth -32390-06-04 15:35 J -10108869.96 -10108869.85 -10108869.70 0.0068 0.0058  
 Moon -32390-06-04 18:43 J -10108869.79 -10108869.72 -10108869.58 0.0068 0.0062 \*  
 Mercury -32388-03-21 06:28 J -10108214.24 -10108214.23 -10108214.18 0.0068 0.0067  
 Mercury -32388-06-17 08:23 J -10108126.22 -10108126.15 -10108126.08 0.0068 0.0061  
 Mercury -32388-09-13 09:35 J -10108038.19 -10108038.10 -10108038.00 0.0069 0.0055  
 Mercury -32388-12-10 10:47 J -10107950.16 -10107950.05 -10107949.93 0.0069 0.0049  
 Mercury -32387-03-08 11:59 J -10107862.11 -10107862.00 -10107861.86 0.0069 0.0043  
 Mercury -32387-06-04 13:26 J -10107774.07 -10107773.94 -10107773.79 0.0069 0.0037  
 Mercury -32387-08-31 15:07 J -10107686.02 -10107685.87 -10107685.72 0.0069 0.0030  
 Mercury -32387-11-27 16:19 J -10107597.97 -10107597.82 -10107597.66 0.0069 0.0024  
 Mercury -32386-02-23 17:31 J -10107509.92 -10107509.77 -10107509.59 0.0069 0.0019  
 Mercury -32386-05-22 19:11 J -10107421.86 -10107421.70 -10107421.53 0.0069 0.0011  
 Mercury -32386-08-18 20:38 J -10107333.80 -10107333.64 -10107333.47 0.0069 0.0005  
 Mercury -32386-11-14 22:04 J -10107245.74 -10107245.58 -10107245.41 0.0070 0.0002  
 Mercury -32385-02-10 23:31 J -10107157.68 -10107157.52 -10107157.35 0.0070 0.0009  
 Mercury -32385-05-09 00:57 J -10107069.62 -10107069.46 -10107069.29 0.0070 0.0015

Mercury -32385-08-05 02:23 J -10106981.55 -10106981.40 -10106981.24 0.0070 0.0022

Mercury -32385-11-01 03:35 J -10106893.49 -10106893.35 -10106893.18 0.0070 0.0029

Mercury -32384-01-28 05:31 J -10106805.41 -10106805.27 -10106805.12 0.0070 0.0035

Mercury -32384-04-26 06:43 J -10106717.34 -10106717.22 -10106717.07 0.0070 0.0043

Mercury -32384-07-23 08:09 J -10106629.26 -10106629.16 -10106629.02 0.0070 0.0050

Mercury -32384-10-19 09:35 J -10106541.18 -10106541.10 -10106540.98 0.0070 0.0057

Mercury -32383-01-15 11:16 J -10106453.09 -10106453.03 -10106452.94 0.0071 0.0064

Mercury -32383-04-13 12:57 J -10106364.96 -10106364.96 -10106364.94 0.0071 0.0071

Jupiter -32309-01-21 20:52 J -10079419.15 -10079418.63 -10079418.09 0.0079 0.0017

Venus -32309-06-14 19:11 J -10079273.90 -10079273.70 -10079273.48 0.0079 0.0025

Venus -32308-01-26 05:45 J -10079048.42 -10079048.26 -10079048.08 0.0079 0.0050

Moon -32305-12-06 10:33 J -10077638.32 -10077638.06 -10077637.79 0.0077 0.0008

Earth -32305-12-06 13:26 J -10077638.19 -10077637.94 -10077637.67 0.0077 0.0009 \*

Mercury -32303-11-14 10:47 J -10076930.08 -10076930.05 -10076929.99 0.0076 0.0072

Mercury -32302-02-10 12:14 J -10076842.06 -10076841.99 -10076841.90 0.0076 0.0064

Mercury -32302-05-09 13:55 J -10076754.02 -10076753.92 -10076753.82 0.0075 0.0056

Mercury -32302-08-05 14:52 J -10076665.98 -10076665.88 -10076665.75 0.0075 0.0049

Mercury -32302-11-01 16:33 J -10076577.94 -10076577.81 -10076577.68 0.0075 0.0040

Mercury -32301-01-28 17:45 J -10076489.89 -10076489.76 -10076489.62 0.0075 0.0033

Mercury -32301-04-25 19:11 J -10076401.84 -10076401.70 -10076401.56 0.0075 0.0025

Mercury -32301-07-22 20:23 J -10076313.79 -10076313.65 -10076313.50 0.0075 0.0018

Mercury -32301-10-18 21:50 J -10076225.74 -10076225.59 -10076225.44 0.0075 0.0011

Mercury -32300-01-14 23:02 J -10076137.69 -10076137.54 -10076137.39 0.0074 0.0003

Mercury -32300-04-13 00:14 J -10076049.63 -10076049.49 -10076049.34 0.0074 0.0005

Mercury -32300-07-10 01:26 J -10075961.58 -10075961.44 -10075961.28 0.0074 0.0012

Mercury -32300-10-06 02:52 J -10075873.53 -10075873.38 -10075873.24 0.0074 0.0018

Mercury -32299-01-02 04:04 J -10075785.47 -10075785.33 -10075785.19 0.0074 0.0025

Mercury -32299-03-31 05:16 J -10075697.41 -10075697.28 -10075697.14 0.0074 0.0032

Mercury -32299-06-27 06:28 J -10075609.35 -10075609.23 -10075609.10 0.0074 0.0039

Mercury -32299-09-23 07:40 J -10075521.29 -10075521.18 -10075521.06 0.0074 0.0046

Mercury -32299-12-20 08:38 J -10075433.23 -10075433.14 -10075433.03 0.0073 0.0053  
 Mercury -32298-03-18 09:50 J -10075345.16 -10075345.09 -10075344.99 0.0073 0.0059  
 Mercury -32298-06-14 10:47 J -10075257.09 -10075257.05 -10075256.97 0.0073 0.0066  
 Mercury -32298-09-10 12:14 J -10075169.00 -10075168.99 -10075168.96 0.0073 0.0072  
 Mars -32150-12-02 03:50 J -10021029.39 -10021029.34 -10021029.25 0.0064 0.0063  
 Venus -32149-02-02 12:28 J -10020967.06 -10020966.98 -10020966.86 0.0065 0.0057  
 Venus -32149-09-14 16:19 J -10020742.01 -10020741.82 -10020741.60 0.0065 0.0018  
 Venus -32148-04-27 20:38 J -10020516.85 -10020516.64 -10020516.44 0.0065 0.0022  
 Venus -32148-12-08 23:45 J -10020291.53 -10020291.51 -10020291.43 0.0065 0.0064  
 Earth -32143-06-04 04:33 J -10018653.41 -10018653.31 -10018653.18 0.0067 0.0059  
 Moon -32143-06-04 07:40 J -10018653.25 -10018653.18 -10018653.05 0.0067 0.0061 \*  
 Moon -32142-06-05 16:47 J -10018287.03 -10018286.80 -10018286.56 0.0067 0.0029  
 Earth -32142-06-05 19:55 J -10018286.89 -10018286.67 -10018286.42 0.0067 0.0028 \*  
 Mercury -32140-10-09 15:07 J -10017429.90 -10017429.87 -10017429.79 0.0068 0.0065  
 Mercury -32139-01-05 17:02 J -10017341.88 -10017341.79 -10017341.70 0.0069 0.0058  
 Mercury -32139-04-03 18:14 J -10017253.84 -10017253.74 -10017253.63 0.0069 0.0052  
 Mercury -32139-06-30 19:26 J -10017165.80 -10017165.69 -10017165.55 0.0069 0.0046  
 Mercury -32139-09-26 20:52 J -10017077.76 -10017077.63 -10017077.49 0.0069 0.0040  
 Mercury -32139-12-23 22:33 J -10016989.71 -10016989.56 -10016989.42 0.0069 0.0033  
 Mercury -32138-03-21 23:45 J -10016901.66 -10016901.51 -10016901.35 0.0069 0.0027  
 Mercury -32138-06-18 00:57 J -10016813.61 -10016813.46 -10016813.29 0.0069 0.0021  
 Mercury -32138-09-14 02:38 J -10016725.55 -10016725.39 -10016725.23 0.0069 0.0014  
 Mercury -32138-12-11 04:04 J -10016637.50 -10016637.33 -10016637.16 0.0069 0.0008  
 Mercury -32137-03-08 05:31 J -10016549.44 -10016549.27 -10016549.10 0.0070 0.0001  
 Mercury -32137-06-04 06:57 J -10016461.38 -10016461.21 -10016461.04 0.0070 0.0005  
 Mercury -32137-08-31 08:23 J -10016373.31 -10016373.15 -10016372.98 0.0070 0.0012  
 Mercury -32137-11-27 09:35 J -10016285.25 -10016285.10 -10016284.93 0.0070 0.0019  
 Mercury -32136-02-23 11:16 J -10016197.18 -10016197.03 -10016196.87 0.0070 0.0026  
 Mercury -32136-05-22 12:43 J -10016109.11 -10016108.97 -10016108.81 0.0070 0.0032  
 Mercury -32136-08-18 14:09 J -10016021.04 -10016020.91 -10016020.76 0.0070 0.0039

Mercury -32136-11-14 15:35 J -10015932.96 -10015932.85 -10015932.71 0.0070 0.0046

Mercury -32135-02-10 17:02 J -10015844.88 -10015844.79 -10015844.66 0.0070 0.0054

Mercury -32135-05-09 18:28 J -10015756.79 -10015756.73 -10015756.62 0.0071 0.0061

Mercury -32135-08-05 20:09 J -10015668.69 -10015668.66 -10015668.60 0.0071 0.0068

Venus -32061-05-17 19:26 J -9988719.84 -9988719.69 -9988719.53 0.0079 0.0058

Venus -32061-12-29 05:59 J -9988494.46 -9988494.25 -9988494.02 0.0079 0.0018

Earth -32057-12-07 16:33 J -9987054.99 -9987054.81 -9987054.58 0.0077 0.0047

Moon -32057-12-07 19:55 J -9987054.86 -9987054.67 -9987054.44 0.0077 0.0043 \*

Mercury -32054-03-08 18:43 J -9986233.73 -9986233.72 -9986233.67 0.0076 0.0074

Mercury -32054-06-04 20:23 J -9986145.72 -9986145.65 -9986145.57 0.0076 0.0066

Mercury -32054-08-31 21:35 J -9986057.68 -9986057.60 -9986057.49 0.0075 0.0058

Mercury -32054-11-27 23:02 J -9985969.64 -9985969.54 -9985969.42 0.0075 0.0050

Mercury -32053-02-24 00:28 J -9985881.60 -9985881.48 -9985881.35 0.0075 0.0043

Mercury -32053-05-22 01:40 J -9985793.55 -9985793.43 -9985793.29 0.0075 0.0035

Mercury -32053-08-18 02:52 J -9985705.50 -9985705.38 -9985705.22 0.0075 0.0028

Mercury -32053-11-14 04:33 J -9985617.45 -9985617.31 -9985617.16 0.0075 0.0020

Mercury -32052-02-10 05:45 J -9985529.40 -9985529.26 -9985529.11 0.0075 0.0013

Mercury -32052-05-09 07:11 J -9985441.35 -9985441.20 -9985441.05 0.0074 0.0005

Mercury -32052-08-05 08:23 J -9985353.30 -9985353.15 -9985353.00 0.0074 0.0002

Mercury -32052-11-01 09:35 J -9985265.25 -9985265.10 -9985264.95 0.0074 0.0009

Mercury -32051-01-28 11:02 J -9985177.19 -9985177.04 -9985176.90 0.0074 0.0017

Mercury -32051-04-26 11:59 J -9985089.14 -9985089.00 -9985088.85 0.0074 0.0024

Mercury -32051-07-23 13:11 J -9985001.08 -9985000.95 -9985000.81 0.0074 0.0031

Mercury -32051-10-19 14:23 J -9984913.02 -9984912.90 -9984912.76 0.0074 0.0037

Mercury -32050-01-15 15:21 J -9984824.96 -9984824.86 -9984824.72 0.0074 0.0045

Mercury -32050-04-13 17:02 J -9984736.90 -9984736.79 -9984736.69 0.0073 0.0051

Mercury -32050-07-10 17:59 J -9984648.83 -9984648.75 -9984648.65 0.0073 0.0058

Mercury -32050-10-06 18:57 J -9984560.76 -9984560.71 -9984560.63 0.0073 0.0065

Mercury -32049-01-02 20:09 J -9984472.68 -9984472.66 -9984472.61 0.0073 0.0071

# 32ND MILLENNIUM BCE

This is a list of transits visible from Pluto in the 32nd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	-31901-03-11 01:55 J	-9930347.55	-9930347.42	-9930347.24	0.0065	0.0055		
Venus	-31901-08-17 23:02 J	-9930187.73	-9930187.54	-9930187.34	0.0065	0.0026		
Venus	-31900-03-31 02:52 J	-9929962.58	-9929962.38	-9929962.16	0.0065	0.0014		
Venus	-31900-11-11 06:43 J	-9929737.32	-9929737.22	-9929737.08	0.0065	0.0054		
Earth	-31894-06-07 05:02 J	-9927703.54	-9927703.29	-9927703.03	0.0067	0.0011		
Moon	-31894-06-07 07:55 J	-9927703.43	-9927703.17	-9927702.90	0.0067	0.0007	*	
Mercury	-31891-02-01 00:14 J	-9926733.54	-9926733.49	-9926733.43	0.0069	0.0064		
Mercury	-31891-04-30 01:26 J	-9926645.52	-9926645.44	-9926645.35	0.0069	0.0058		
Mercury	-31891-07-27 02:38 J	-9926557.48	-9926557.39	-9926557.27	0.0069	0.0052		
Mercury	-31891-10-23 03:50 J	-9926469.44	-9926469.34	-9926469.20	0.0069	0.0046		
Mercury	-31890-01-19 05:31 J	-9926381.40	-9926381.27	-9926381.13	0.0069	0.0039		
Mercury	-31890-04-17 06:43 J	-9926293.35	-9926293.22	-9926293.06	0.0069	0.0034		
Mercury	-31890-07-14 08:09 J	-9926205.30	-9926205.16	-9926205.00	0.0069	0.0027		
Mercury	-31890-10-10 09:35 J	-9926117.25	-9926117.10	-9926116.93	0.0069	0.0021		
Mercury	-31889-01-06 11:16 J	-9926029.19	-9926029.03	-9926028.87	0.0069	0.0014		
Mercury	-31889-04-03 12:43 J	-9925941.14	-9925940.97	-9925940.81	0.0070	0.0007		
Mercury	-31889-06-30 14:09 J	-9925853.08	-9925852.91	-9925852.74	0.0070	0.0001		
Mercury	-31889-09-26 15:35 J	-9925765.02	-9925764.85	-9925764.68	0.0070	0.0006		
Mercury	-31889-12-23 16:47 J	-9925676.96	-9925676.80	-9925676.63	0.0070	0.0013		

Mercury	-31888-03-21 18:28 J	-9925588.89	-9925588.73	-9925588.57	0.0070	0.0019
Mercury	-31888-06-17 19:55 J	-9925500.82	-9925500.67	-9925500.51	0.0070	0.0026
Mercury	-31888-09-13 21:07 J	-9925412.75	-9925412.62	-9925412.46	0.0070	0.0034
Mercury	-31888-12-10 22:33 J	-9925324.68	-9925324.56	-9925324.40	0.0070	0.0041
Mercury	-31887-03-08 23:59 J	-9925236.60	-9925236.50	-9925236.35	0.0070	0.0048
Mercury	-31887-06-05 01:40 J	-9925148.52	-9925148.43	-9925148.31	0.0071	0.0054
Mercury	-31887-09-01 03:07 J	-9925060.43	-9925060.37	-9925060.27	0.0071	0.0062
Mercury	-31887-11-28 04:33 J	-9924972.32	-9924972.31	-9924972.25	0.0071	0.0069
Venus	-31813-04-19 22:04 J	-9898165.59	-9898165.58	-9898165.53	0.0080	0.0079
Venus	-31813-12-01 09:07 J	-9897940.34	-9897940.12	-9897939.89	0.0079	0.0002
Venus	-31812-07-14 19:11 J	-9897714.76	-9897714.70	-9897714.60	0.0079	0.0073
Moon	-31809-12-08 20:09 J	-9896471.72	-9896471.66	-9896471.53	0.0077	0.0072
Earth	-31809-12-08 23:45 J	-9896471.55	-9896471.51	-9896471.39	0.0077	0.0073 *
Earth	-31808-12-11 00:57 J	-9896104.60	-9896104.46	-9896104.27	0.0076	0.0059
Moon	-31808-12-11 04:47 J	-9896104.47	-9896104.30	-9896104.13	0.0076	0.0058 *
Mercury	-31806-07-01 03:35 J	-9895537.37	-9895537.35	-9895537.30	0.0076	0.0073
Mercury	-31806-09-27 05:16 J	-9895449.35	-9895449.28	-9895449.20	0.0075	0.0065
Mercury	-31806-12-24 06:14 J	-9895361.32	-9895361.24	-9895361.12	0.0075	0.0058
Mercury	-31805-03-21 07:55 J	-9895273.28	-9895273.17	-9895273.05	0.0075	0.0049
Mercury	-31805-06-17 09:07 J	-9895185.23	-9895185.12	-9895184.98	0.0075	0.0042
Mercury	-31805-09-13 10:33 J	-9895097.19	-9895097.06	-9895096.92	0.0075	0.0034
Mercury	-31805-12-10 11:45 J	-9895009.14	-9895009.01	-9895008.86	0.0075	0.0027
Mercury	-31804-03-08 13:26 J	-9894921.09	-9894920.94	-9894920.80	0.0075	0.0019
Mercury	-31804-06-04 14:38 J	-9894833.04	-9894832.89	-9894832.74	0.0074	0.0012
Mercury	-31804-08-31 15:50 J	-9894744.99	-9894744.84	-9894744.69	0.0074	0.0005
Mercury	-31804-11-27 17:16 J	-9894656.93	-9894656.78	-9894656.63	0.0074	0.0003
Mercury	-31803-02-23 18:28 J	-9894568.88	-9894568.73	-9894568.58	0.0074	0.0010
Mercury	-31803-05-22 19:40 J	-9894480.82	-9894480.68	-9894480.53	0.0074	0.0017
Mercury	-31803-08-18 20:52 J	-9894392.77	-9894392.63	-9894392.49	0.0074	0.0024
Mercury	-31803-11-14 21:50 J	-9894304.71	-9894304.59	-9894304.44	0.0074	0.0032

Mercury	-31802-02-10 23:02 J	-9894216.65	-9894216.54	-9894216.40	0.0074	0.0039
Mercury	-31802-05-10 00:28 J	-9894128.59	-9894128.48	-9894128.36	0.0073	0.0045
Mercury	-31802-08-06 01:40 J	-9894040.53	-9894040.43	-9894040.32	0.0073	0.0052
Mercury	-31802-11-02 02:38 J	-9893952.47	-9893952.39	-9893952.29	0.0073	0.0059
Mercury	-31801-01-29 03:50 J	-9893864.40	-9893864.34	-9893864.26	0.0073	0.0065
Mercury	-31801-04-26 04:47 J	-9893776.31	-9893776.30	-9893776.26	0.0073	0.0072
Mars	-31653-06-19 01:40 J	-9839665.64	-9839665.43	-9839665.18	0.0065	0.0042
Venus	-31653-07-21 05:59 J	-9839633.42	-9839633.25	-9839633.04	0.0065	0.0032
Venus	-31652-03-03 10:19 J	-9839408.28	-9839408.07	-9839407.85	0.0065	0.0008
Venus	-31652-10-14 13:55 J	-9839183.05	-9839182.92	-9839182.76	0.0065	0.0048
Moon	-31646-06-08 12:57 J	-9837120.21	-9837119.96	-9837119.70	0.0067	0.0006
Earth	-31646-06-08 15:07 J	-9837120.12	-9837119.87	-9837119.60	0.0067	0.0004 *
Mercury	-31643-05-26 08:52 J	-9836037.18	-9836037.13	-9836037.05	0.0069	0.0063
Mercury	-31643-08-22 10:04 J	-9835949.15	-9835949.08	-9835948.97	0.0069	0.0057
Mercury	-31643-11-18 11:45 J	-9835861.12	-9835861.01	-9835860.90	0.0069	0.0050
Mercury	-31642-02-14 12:57 J	-9835773.08	-9835772.96	-9835772.82	0.0069	0.0044
Mercury	-31642-05-13 14:09 J	-9835685.03	-9835684.91	-9835684.75	0.0069	0.0038
Mercury	-31642-08-09 15:50 J	-9835596.98	-9835596.84	-9835596.69	0.0069	0.0031
Mercury	-31642-11-05 17:02 J	-9835508.93	-9835508.79	-9835508.62	0.0069	0.0025
Mercury	-31641-02-01 18:43 J	-9835420.88	-9835420.72	-9835420.56	0.0069	0.0019
Mercury	-31641-04-29 20:09 J	-9835332.82	-9835332.66	-9835332.50	0.0070	0.0012
Mercury	-31641-07-26 21:35 J	-9835244.77	-9835244.60	-9835244.43	0.0070	0.0005
Mercury	-31641-10-22 23:02 J	-9835156.71	-9835156.54	-9835156.37	0.0070	0.0001
Mercury	-31640-01-19 00:28 J	-9835068.65	-9835068.48	-9835068.31	0.0070	0.0008
Mercury	-31640-04-17 01:40 J	-9834980.58	-9834980.43	-9834980.25	0.0070	0.0015
Mercury	-31640-07-14 03:21 J	-9834892.52	-9834892.36	-9834892.20	0.0070	0.0021
Mercury	-31640-10-10 04:47 J	-9834804.45	-9834804.30	-9834804.14	0.0070	0.0028
Mercury	-31639-01-06 06:14 J	-9834716.38	-9834716.24	-9834716.09	0.0070	0.0035
Mercury	-31639-04-04 07:40 J	-9834628.30	-9834628.18	-9834628.03	0.0070	0.0043
Mercury	-31639-07-01 09:07 J	-9834540.22	-9834540.12	-9834539.98	0.0071	0.0050

Mercury	-31639-09-27 10:33 J	-9834452.14	-9834452.06	-9834451.94	0.0071	0.0057
Mercury	-31639-12-24 12:14 J	-9834364.05	-9834363.99	-9834363.90	0.0071	0.0064
Mercury	-31638-03-22 14:09 J	-9834275.91	-9834275.91	-9834275.91	0.0071	0.0071
Venus	-31565-11-03 14:23 J	-9807386.12	-9807385.90	-9807385.68	0.0079	0.0013
Venus	-31564-06-17 00:28 J	-9807160.60	-9807160.48	-9807160.32	0.0079	0.0063
Moon	-31560-12-12 09:21 J	-9805521.29	-9805521.11	-9805520.90	0.0076	0.0048
Earth	-31560-12-12 12:14 J	-9805521.18	-9805520.99	-9805520.76	0.0076	0.0045 *
Mercury	-31558-10-23 13:11 J	-9804840.99	-9804840.95	-9804840.87	0.0075	0.0069
Mercury	-31557-01-19 14:38 J	-9804752.96	-9804752.89	-9804752.79	0.0075	0.0061
Mercury	-31557-04-16 16:04 J	-9804664.93	-9804664.83	-9804664.71	0.0075	0.0053
Mercury	-31557-07-13 17:16 J	-9804576.88	-9804576.78	-9804576.64	0.0075	0.0046
Mercury	-31557-10-09 18:43 J	-9804488.84	-9804488.72	-9804488.58	0.0075	0.0038
Mercury	-31556-01-05 20:09 J	-9804400.79	-9804400.66	-9804400.52	0.0075	0.0031
Mercury	-31556-04-03 21:35 J	-9804312.74	-9804312.60	-9804312.46	0.0075	0.0023
Mercury	-31556-06-30 22:47 J	-9804224.69	-9804224.55	-9804224.40	0.0075	0.0016
Mercury	-31556-09-27 00:14 J	-9804136.64	-9804136.49	-9804136.34	0.0074	0.0008
Mercury	-31556-12-24 01:26 J	-9804048.59	-9804048.44	-9804048.29	0.0074	0.0001
Mercury	-31555-03-22 02:38 J	-9803960.53	-9803960.39	-9803960.24	0.0074	0.0007
Mercury	-31555-06-18 03:50 J	-9803872.48	-9803872.34	-9803872.19	0.0074	0.0014
Mercury	-31555-09-14 05:02 J	-9803784.43	-9803784.29	-9803784.14	0.0074	0.0021
Mercury	-31555-12-11 06:14 J	-9803696.37	-9803696.24	-9803696.09	0.0074	0.0028
Mercury	-31554-03-09 07:26 J	-9803608.31	-9803608.19	-9803608.05	0.0074	0.0035
Mercury	-31554-06-05 08:38 J	-9803520.25	-9803520.14	-9803520.01	0.0074	0.0042
Mercury	-31554-09-01 09:50 J	-9803432.19	-9803432.09	-9803431.97	0.0073	0.0049
Mercury	-31554-11-28 11:02 J	-9803344.13	-9803344.04	-9803343.94	0.0073	0.0055
Mercury	-31553-02-24 11:59 J	-9803256.06	-9803256.00	-9803255.91	0.0073	0.0062
Mercury	-31553-05-22 13:26 J	-9803167.98	-9803167.94	-9803167.89	0.0073	0.0068
Venus	-31405-06-23 16:04 J	-9749079.01	-9749078.83	-9749078.62	0.0065	0.0028
Mars	-31405-09-27 10:33 J	-9748983.34	-9748983.06	-9748982.75	0.0065	0.0012
Venus	-31404-02-03 19:55 J	-9748853.87	-9748853.67	-9748853.44	0.0065	0.0012



Venus	-31404-09-16 23:31 J	-9748628.62	-9748628.52	-9748628.36	0.0065	0.0052
Earth	-31398-06-10 06:14 J	-9746536.50	-9746536.24	-9746535.98	0.0067	0.0004
Moon	-31398-06-10 07:26 J	-9746536.46	-9746536.19	-9746535.92	0.0067	0.0002 *
Mercury	-31395-06-21 17:45 J	-9745428.80	-9745428.76	-9745428.69	0.0069	0.0064
Mercury	-31395-09-17 18:57 J	-9745340.78	-9745340.71	-9745340.60	0.0069	0.0058
Mercury	-31395-12-14 20:38 J	-9745252.74	-9745252.64	-9745252.53	0.0069	0.0051
Mercury	-31394-03-12 21:50 J	-9745164.70	-9745164.59	-9745164.45	0.0069	0.0045
Mercury	-31394-06-08 23:02 J	-9745076.66	-9745076.54	-9745076.39	0.0069	0.0039
Mercury	-31394-09-05 00:43 J	-9744988.61	-9744988.47	-9744988.32	0.0069	0.0032
Mercury	-31394-12-02 01:55 J	-9744900.56	-9744900.42	-9744900.25	0.0069	0.0027
Mercury	-31393-02-28 03:35 J	-9744812.51	-9744812.35	-9744812.19	0.0070	0.0019
Mercury	-31393-05-26 05:02 J	-9744724.45	-9744724.29	-9744724.13	0.0070	0.0013
Mercury	-31393-08-22 06:28 J	-9744636.40	-9744636.23	-9744636.06	0.0070	0.0006
Mercury	-31393-11-18 07:55 J	-9744548.34	-9744548.17	-9744548.00	0.0070	0.0000
Mercury	-31392-02-14 09:21 J	-9744460.27	-9744460.11	-9744459.94	0.0070	0.0007
Mercury	-31392-05-13 10:47 J	-9744372.21	-9744372.05	-9744371.88	0.0070	0.0014
Mercury	-31392-08-09 11:59 J	-9744284.15	-9744284.00	-9744283.83	0.0070	0.0022
Mercury	-31392-11-05 13:55 J	-9744196.08	-9744195.92	-9744195.77	0.0070	0.0028
Mercury	-31391-02-01 15:07 J	-9744108.01	-9744107.87	-9744107.71	0.0070	0.0035
Mercury	-31391-04-30 16:33 J	-9744019.93	-9744019.81	-9744019.66	0.0071	0.0042
Mercury	-31391-07-27 18:14 J	-9743931.85	-9743931.74	-9743931.61	0.0071	0.0049
Mercury	-31391-10-23 19:40 J	-9743843.77	-9743843.68	-9743843.57	0.0071	0.0056
Mercury	-31390-01-19 21:21 J	-9743755.68	-9743755.61	-9743755.53	0.0071	0.0063
Mercury	-31390-04-17 23:02 J	-9743667.55	-9743667.54	-9743667.52	0.0071	0.0070
Venus	-31317-10-06 22:47 J	-9716831.77	-9716831.55	-9716831.32	0.0079	0.0010
Venus	-31316-05-20 09:07 J	-9716606.23	-9716606.12	-9716605.98	0.0079	0.0065
Earth	-31312-12-14 03:21 J	-9714937.54	-9714937.36	-9714937.12	0.0076	0.0045
Moon	-31312-12-14 05:59 J	-9714937.45	-9714937.25	-9714937.03	0.0076	0.0047 *
Mercury	-31310-11-18 22:33 J	-9714232.61	-9714232.56	-9714232.50	0.0075	0.0070
Mercury	-31309-02-14 23:45 J	-9714144.58	-9714144.51	-9714144.41	0.0075	0.0062

Mercury	-31309-05-13 01:11 J	-9714056.54	-9714056.45	-9714056.34	0.0075	0.0054
Mercury	-31309-08-09 02:38 J	-9713968.50	-9713968.39	-9713968.27	0.0075	0.0046
Mercury	-31309-11-05 03:50 J	-9713880.46	-9713880.34	-9713880.20	0.0075	0.0039
Mercury	-31308-02-01 05:16 J	-9713792.41	-9713792.28	-9713792.14	0.0075	0.0031
Mercury	-31308-04-30 06:28 J	-9713704.36	-9713704.23	-9713704.08	0.0075	0.0024
Mercury	-31308-07-27 07:55 J	-9713616.31	-9713616.17	-9713616.02	0.0074	0.0016
Mercury	-31308-10-23 09:21 J	-9713528.26	-9713528.11	-9713527.96	0.0074	0.0009
Mercury	-31307-01-19 10:33 J	-9713440.21	-9713440.06	-9713439.91	0.0074	0.0001
Mercury	-31307-04-17 11:45 J	-9713352.16	-9713352.01	-9713351.86	0.0074	0.0006
Mercury	-31307-07-14 12:57 J	-9713264.10	-9713263.96	-9713263.81	0.0074	0.0013
Mercury	-31307-10-10 14:23 J	-9713176.05	-9713175.90	-9713175.76	0.0074	0.0020
Mercury	-31306-01-06 15:21 J	-9713087.99	-9713087.86	-9713087.71	0.0074	0.0027
Mercury	-31306-04-04 16:19 J	-9712999.93	-9712999.82	-9712999.67	0.0074	0.0035
Mercury	-31306-07-01 17:31 J	-9712911.88	-9712911.77	-9712911.63	0.0073	0.0042
Mercury	-31306-09-27 18:43 J	-9712823.81	-9712823.72	-9712823.59	0.0073	0.0049
Mercury	-31306-12-24 20:09 J	-9712735.75	-9712735.66	-9712735.56	0.0073	0.0055
Mercury	-31305-03-21 21:21 J	-9712647.68	-9712647.61	-9712647.53	0.0073	0.0061
Mercury	-31305-06-17 22:19 J	-9712559.61	-9712559.57	-9712559.51	0.0073	0.0068
Venus	-31158-10-14 23:31 J	-9658749.59	-9658749.52	-9658749.41	0.0064	0.0059
Venus	-31157-05-27 03:21 J	-9658524.55	-9658524.36	-9658524.14	0.0065	0.0020
Mars	-31156-01-05 23:02 J	-9658300.79	-9658300.54	-9658300.25	0.0065	0.0028
Venus	-31156-01-07 07:26 J	-9658299.39	-9658299.19	-9658298.98	0.0065	0.0020
Venus	-31156-08-20 11:02 J	-9658074.10	-9658074.04	-9658073.95	0.0065	0.0060
Moon	-31150-06-11 22:47 J	-9655952.79	-9655952.55	-9655952.29	0.0067	0.0006
Earth	-31150-06-11 23:59 J	-9655952.76	-9655952.50	-9655952.24	0.0067	0.0003 *
Mercury	-31147-04-21 02:09 J	-9654908.41	-9654908.41	-9654908.40	0.0069	0.0069
Mercury	-31147-07-18 03:07 J	-9654820.41	-9654820.37	-9654820.28	0.0069	0.0063
Mercury	-31147-10-14 04:47 J	-9654732.39	-9654732.30	-9654732.20	0.0069	0.0056
Mercury	-31146-01-10 05:59 J	-9654644.35	-9654644.25	-9654644.13	0.0069	0.0050
Mercury	-31146-04-08 07:11 J	-9654556.31	-9654556.20	-9654556.05	0.0069	0.0044

Mercury	-31146-07-05 08:52 J	-9654468.26	-9654468.13	-9654467.98	0.0069	0.0037
Mercury	-31146-10-01 10:04 J	-9654380.21	-9654380.08	-9654379.92	0.0069	0.0031
Mercury	-31146-12-28 11:31 J	-9654292.16	-9654292.02	-9654291.85	0.0070	0.0025
Mercury	-31145-03-25 13:11 J	-9654204.11	-9654203.95	-9654203.79	0.0070	0.0018
Mercury	-31145-06-21 14:23 J	-9654116.06	-9654115.90	-9654115.73	0.0070	0.0012
Mercury	-31145-09-17 16:04 J	-9654028.00	-9654027.83	-9654027.67	0.0070	0.0005
Mercury	-31145-12-14 17:31 J	-9653939.94	-9653939.77	-9653939.61	0.0070	0.0002
Mercury	-31144-03-12 18:43 J	-9653851.88	-9653851.72	-9653851.55	0.0070	0.0009
Mercury	-31144-06-08 20:09 J	-9653763.81	-9653763.66	-9653763.49	0.0070	0.0016
Mercury	-31144-09-04 21:50 J	-9653675.75	-9653675.59	-9653675.43	0.0070	0.0023
Mercury	-31144-12-01 23:16 J	-9653587.68	-9653587.53	-9653587.37	0.0070	0.0030
Mercury	-31143-02-28 00:43 J	-9653499.61	-9653499.47	-9653499.32	0.0071	0.0037
Mercury	-31143-05-27 02:09 J	-9653411.53	-9653411.41	-9653411.27	0.0071	0.0044
Mercury	-31143-08-23 03:35 J	-9653323.45	-9653323.35	-9653323.22	0.0071	0.0051
Mercury	-31143-11-19 05:16 J	-9653235.36	-9653235.28	-9653235.18	0.0071	0.0058
Mercury	-31142-02-15 06:57 J	-9653147.27	-9653147.21	-9653147.14	0.0071	0.0065
Venus	-31069-01-27 23:16 J	-9626502.62	-9626502.53	-9626502.40	0.0080	0.0070
Mars	-31069-05-27 14:52 J	-9626381.97	-9626381.88	-9626381.74	0.0079	0.0075
Venus	-31069-09-09 10:33 J	-9626277.28	-9626277.06	-9626276.83	0.0079	0.0007
Earth	-31065-12-13 23:16 J	-9624720.61	-9624720.53	-9624720.42	0.0077	0.0071
Moon	-31065-12-14 01:55 J	-9624720.51	-9624720.42	-9624720.29	0.0077	0.0069 *
Moon	-31064-12-15 22:19 J	-9624353.71	-9624353.57	-9624353.40	0.0076	0.0059
Earth	-31064-12-15 23:59 J	-9624353.63	-9624353.50	-9624353.32	0.0076	0.0061 *
Mercury	-31062-09-18 07:11 J	-9623712.21	-9623712.20	-9623712.17	0.0075	0.0074
Mercury	-31062-12-15 08:38 J	-9623624.20	-9623624.14	-9623624.06	0.0075	0.0066
Mercury	-31061-03-12 10:04 J	-9623536.17	-9623536.08	-9623535.98	0.0075	0.0059
Mercury	-31061-06-08 11:16 J	-9623448.13	-9623448.03	-9623447.91	0.0075	0.0051
Mercury	-31061-09-04 12:43 J	-9623360.08	-9623359.97	-9623359.84	0.0075	0.0043
Mercury	-31061-12-01 13:55 J	-9623272.04	-9623271.92	-9623271.77	0.0075	0.0036
Mercury	-31060-02-27 15:35 J	-9623183.99	-9623183.85	-9623183.71	0.0075	0.0028

Mercury	-31060-05-26 16:47 J	-9623095.94	-9623095.80	-9623095.65	0.0074	0.0020
Mercury	-31060-08-22 17:59 J	-9623007.89	-9623007.75	-9623007.59	0.0074	0.0013
Mercury	-31060-11-18 19:26 J	-9622919.84	-9622919.69	-9622919.54	0.0074	0.0006
Mercury	-31059-02-14 20:38 J	-9622831.79	-9622831.64	-9622831.49	0.0074	0.0002
Mercury	-31059-05-13 21:50 J	-9622743.73	-9622743.59	-9622743.44	0.0074	0.0009
Mercury	-31059-08-09 23:16 J	-9622655.68	-9622655.53	-9622655.39	0.0074	0.0016
Mercury	-31059-11-06 00:14 J	-9622567.62	-9622567.49	-9622567.34	0.0074	0.0023
Mercury	-31058-02-02 01:26 J	-9622479.57	-9622479.44	-9622479.30	0.0074	0.0030
Mercury	-31058-05-01 02:38 J	-9622391.51	-9622391.39	-9622391.25	0.0073	0.0037
Mercury	-31058-07-28 03:50 J	-9622303.45	-9622303.34	-9622303.21	0.0073	0.0044
Mercury	-31058-10-24 04:47 J	-9622215.39	-9622215.30	-9622215.18	0.0073	0.0052
Mercury	-31057-01-20 05:59 J	-9622127.32	-9622127.25	-9622127.14	0.0073	0.0058
Mercury	-31057-04-17 07:26 J	-9622039.25	-9622039.19	-9622039.12	0.0073	0.0064
Mercury	-31057-07-14 08:23 J	-9621951.17	-9621951.15	-9621951.11	0.0073	0.0071

# 31ST MILLENNIUM BCE

This is a list of transits visible from Pluto in the 31st millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-30910-09-17 13:26 J	-9568195.09	-9568194.94	-9568194.75	0.0065	0.0041		
Venus	-30909-04-29 17:45 J	-9567969.98	-9567969.76	-9567969.55	0.0065	0.0002		
Venus	-30909-12-10 21:21 J	-9567744.78	-9567744.61	-9567744.43	0.0065	0.0038		
Earth	-30903-06-12 06:14 J	-9565735.25	-9565735.24	-9565735.17	0.0067	0.0067		

Moon	-30902-06-13 22:04 J	-9565368.83	-9565368.58	-9565368.32	0.0068	0.0023
Earth	-30902-06-13 22:33 J	-9565368.81	-9565368.56	-9565368.32	0.0068	0.0023 *
Mercury	-30899-05-17 12:43 J	-9564300.01	-9564299.97	-9564299.89	0.0069	0.0064
Mercury	-30899-08-13 13:55 J	-9564211.98	-9564211.92	-9564211.81	0.0069	0.0059
Mercury	-30899-11-09 15:35 J	-9564123.95	-9564123.85	-9564123.73	0.0069	0.0052
Mercury	-30898-02-05 16:47 J	-9564035.91	-9564035.80	-9564035.66	0.0069	0.0046
Mercury	-30898-05-04 18:28 J	-9563947.86	-9563947.73	-9563947.59	0.0069	0.0039
Mercury	-30898-07-31 19:40 J	-9563859.81	-9563859.68	-9563859.52	0.0069	0.0033
Mercury	-30898-10-27 21:07 J	-9563771.76	-9563771.62	-9563771.46	0.0070	0.0026
Mercury	-30897-01-23 22:47 J	-9563683.71	-9563683.55	-9563683.39	0.0070	0.0019
Mercury	-30897-04-20 23:59 J	-9563595.66	-9563595.50	-9563595.33	0.0070	0.0013
Mercury	-30897-07-18 01:26 J	-9563507.60	-9563507.44	-9563507.27	0.0070	0.0006
Mercury	-30897-10-14 03:07 J	-9563419.54	-9563419.37	-9563419.21	0.0070	0.0002
Mercury	-30896-01-10 04:19 J	-9563331.48	-9563331.32	-9563331.15	0.0070	0.0008
Mercury	-30896-04-08 05:59 J	-9563243.42	-9563243.25	-9563243.09	0.0070	0.0015
Mercury	-30896-07-05 07:26 J	-9563155.35	-9563155.19	-9563155.03	0.0070	0.0022
Mercury	-30896-10-01 08:52 J	-9563067.28	-9563067.13	-9563066.98	0.0070	0.0029
Mercury	-30896-12-28 10:19 J	-9562979.21	-9562979.07	-9562978.92	0.0071	0.0036
Mercury	-30895-03-26 11:45 J	-9562891.13	-9562891.01	-9562890.87	0.0071	0.0043
Mercury	-30895-06-22 13:11 J	-9562803.06	-9562802.95	-9562802.82	0.0071	0.0050
Mercury	-30895-09-18 14:52 J	-9562714.97	-9562714.88	-9562714.78	0.0071	0.0057
Mercury	-30895-12-15 16:04 J	-9562626.88	-9562626.83	-9562626.74	0.0071	0.0065
Venus	-30822-12-31 14:52 J	-9535948.07	-9535947.88	-9535947.67	0.0079	0.0039
Venus	-30821-08-13 01:40 J	-9535722.62	-9535722.43	-9535722.23	0.0079	0.0037
Mars	-30821-09-05 22:04 J	-9535698.84	-9535698.58	-9535698.31	0.0079	0.0047
Moon	-30817-12-15 22:04 J	-9534136.80	-9534136.58	-9534136.35	0.0077	0.0037
Earth	-30817-12-16 00:43 J	-9534136.67	-9534136.47	-9534136.24	0.0077	0.0041 *
Mercury	-30814-07-18 17:16 J	-9533191.78	-9533191.78	-9533191.78	0.0075	0.0075
Mercury	-30814-10-14 18:14 J	-9533103.79	-9533103.74	-9533103.66	0.0075	0.0068
Mercury	-30813-01-10 19:55 J	-9533015.76	-9533015.67	-9533015.58	0.0075	0.0060

Mercury	-30813-04-07 20:52 J	-9532927.72	-9532927.63	-9532927.50	0.0075	0.0052
Mercury	-30813-07-04 22:33 J	-9532839.68	-9532839.56	-9532839.43	0.0075	0.0044
Mercury	-30813-09-30 23:45 J	-9532751.63	-9532751.51	-9532751.37	0.0075	0.0037
Mercury	-30813-12-28 01:11 J	-9532663.58	-9532663.45	-9532663.31	0.0075	0.0029
Mercury	-30812-03-26 02:23 J	-9532575.54	-9532575.40	-9532575.25	0.0074	0.0022
Mercury	-30812-06-22 03:50 J	-9532487.49	-9532487.34	-9532487.19	0.0074	0.0014
Mercury	-30812-09-18 05:02 J	-9532399.43	-9532399.29	-9532399.13	0.0074	0.0007
Mercury	-30812-12-15 06:28 J	-9532311.38	-9532311.23	-9532311.08	0.0074	0.0001
Mercury	-30811-03-13 07:40 J	-9532223.33	-9532223.18	-9532223.03	0.0074	0.0008
Mercury	-30811-06-09 08:52 J	-9532135.27	-9532135.13	-9532134.98	0.0074	0.0015
Mercury	-30811-09-05 10:04 J	-9532047.22	-9532047.08	-9532046.93	0.0074	0.0022
Mercury	-30811-12-02 11:16 J	-9531959.16	-9531959.03	-9531958.89	0.0074	0.0029
Mercury	-30810-02-28 12:14 J	-9531871.10	-9531870.99	-9531870.85	0.0073	0.0037
Mercury	-30810-05-27 13:26 J	-9531783.05	-9531782.94	-9531782.81	0.0073	0.0044
Mercury	-30810-08-23 14:38 J	-9531694.98	-9531694.89	-9531694.77	0.0073	0.0050
Mercury	-30810-11-19 15:50 J	-9531606.92	-9531606.84	-9531606.74	0.0073	0.0057
Mercury	-30809-02-15 17:16 J	-9531518.85	-9531518.78	-9531518.71	0.0073	0.0063
Mercury	-30809-05-13 18:14 J	-9531430.77	-9531430.74	-9531430.70	0.0073	0.0070
Venus	-30662-01-08 00:57 J	-9477865.53	-9477865.46	-9477865.32	0.0064	0.0057
Venus	-30662-08-21 05:31 J	-9477640.48	-9477640.27	-9477640.06	0.0065	0.0017
Venus	-30661-04-02 09:21 J	-9477415.31	-9477415.11	-9477414.90	0.0065	0.0022
Venus	-30661-11-13 12:57 J	-9477190.00	-9477189.96	-9477189.88	0.0065	0.0063
Earth	-30655-06-14 07:55 J	-9475151.36	-9475151.17	-9475150.93	0.0067	0.0038
Moon	-30655-06-14 09:21 J	-9475151.32	-9475151.11	-9475150.86	0.0067	0.0036 *
Earth	-30654-06-15 23:45 J	-9474784.65	-9474784.51	-9474784.33	0.0068	0.0053
Moon	-30654-06-15 23:59 J	-9474784.65	-9474784.50	-9474784.31	0.0068	0.0050 *
Mercury	-30652-12-18 22:04 J	-9473867.58	-9473867.58	-9473867.58	0.0069	0.0069
Mercury	-30651-03-16 23:02 J	-9473779.59	-9473779.54	-9473779.46	0.0069	0.0063
Mercury	-30651-06-13 00:28 J	-9473691.56	-9473691.48	-9473691.37	0.0069	0.0057
Mercury	-30651-09-09 01:40 J	-9473603.52	-9473603.43	-9473603.30	0.0069	0.0051

Mercury	-30651-12-06 03:21 J	-9473515.48	-9473515.36	-9473515.23	0.0069	0.0044
Mercury	-30650-03-04 04:33 J	-9473427.44	-9473427.31	-9473427.16	0.0069	0.0038
Mercury	-30650-05-31 05:59 J	-9473339.39	-9473339.25	-9473339.09	0.0070	0.0031
Mercury	-30650-08-27 07:40 J	-9473251.34	-9473251.18	-9473251.02	0.0070	0.0024
Mercury	-30650-11-23 08:52 J	-9473163.28	-9473163.13	-9473162.96	0.0070	0.0018
Mercury	-30649-02-19 10:19 J	-9473075.23	-9473075.07	-9473074.90	0.0070	0.0011
Mercury	-30649-05-17 11:59 J	-9472987.17	-9472987.00	-9472986.84	0.0070	0.0004
Mercury	-30649-08-13 13:26 J	-9472899.11	-9472898.94	-9472898.77	0.0070	0.0003
Mercury	-30649-11-09 14:38 J	-9472811.05	-9472810.89	-9472810.72	0.0070	0.0011
Mercury	-30648-02-05 16:19 J	-9472722.98	-9472722.82	-9472722.66	0.0070	0.0017
Mercury	-30648-05-04 17:45 J	-9472634.92	-9472634.76	-9472634.60	0.0071	0.0024
Mercury	-30648-07-31 19:11 J	-9472546.85	-9472546.70	-9472546.54	0.0071	0.0031
Mercury	-30648-10-27 20:38 J	-9472458.77	-9472458.64	-9472458.49	0.0071	0.0038
Mercury	-30647-01-23 22:19 J	-9472370.70	-9472370.57	-9472370.44	0.0071	0.0045
Mercury	-30647-04-21 23:16 J	-9472282.62	-9472282.53	-9472282.39	0.0071	0.0053
Mercury	-30647-07-19 00:57 J	-9472194.53	-9472194.46	-9472194.35	0.0071	0.0060
Mercury	-30647-10-15 02:38 J	-9472106.43	-9472106.39	-9472106.32	0.0071	0.0067
Venus	-30574-04-22 22:47 J	-9445618.64	-9445618.55	-9445618.40	0.0080	0.0068
Venus	-30574-12-04 10:04 J	-9445393.30	-9445393.08	-9445392.85	0.0079	0.0009
Earth	-30569-12-18 07:55 J	-9443552.42	-9443552.17	-9443551.91	0.0077	0.0009
Moon	-30569-12-18 10:04 J	-9443552.33	-9443552.08	-9443551.81	0.0077	0.0011 *
Mercury	-30566-05-18 03:50 J	-9442671.37	-9442671.34	-9442671.29	0.0075	0.0072
Mercury	-30566-08-14 05:16 J	-9442583.35	-9442583.28	-9442583.19	0.0075	0.0064
Mercury	-30566-11-10 06:28 J	-9442495.32	-9442495.23	-9442495.12	0.0075	0.0056
Mercury	-30565-02-06 07:55 J	-9442407.27	-9442407.17	-9442407.04	0.0075	0.0048
Mercury	-30565-05-04 09:07 J	-9442319.23	-9442319.12	-9442318.98	0.0075	0.0041
Mercury	-30565-07-31 10:47 J	-9442231.18	-9442231.05	-9442230.91	0.0075	0.0033
Mercury	-30565-10-27 11:59 J	-9442143.14	-9442143.00	-9442142.85	0.0074	0.0025
Mercury	-30564-01-23 13:26 J	-9442055.08	-9442054.94	-9442054.79	0.0074	0.0018
Mercury	-30564-04-21 14:38 J	-9441967.03	-9441966.89	-9441966.74	0.0074	0.0011

Mercury	-30564-07-18 16:04 J	-9441878.98	-9441878.83	-9441878.68	0.0074	0.0003
Mercury	-30564-10-14 17:16 J	-9441790.93	-9441790.78	-9441790.63	0.0074	0.0004
Mercury	-30563-01-10 18:28 J	-9441702.87	-9441702.73	-9441702.58	0.0074	0.0012
Mercury	-30563-04-08 19:40 J	-9441614.82	-9441614.68	-9441614.53	0.0074	0.0019
Mercury	-30563-07-05 20:52 J	-9441526.76	-9441526.63	-9441526.48	0.0074	0.0026
Mercury	-30563-10-01 22:04 J	-9441438.71	-9441438.58	-9441438.44	0.0073	0.0033
Mercury	-30563-12-28 23:16 J	-9441350.65	-9441350.53	-9441350.40	0.0073	0.0040
Mercury	-30562-03-27 00:28 J	-9441262.59	-9441262.48	-9441262.36	0.0073	0.0047
Mercury	-30562-06-23 01:40 J	-9441174.52	-9441174.43	-9441174.32	0.0073	0.0053
Mercury	-30562-09-19 02:38 J	-9441086.46	-9441086.39	-9441086.29	0.0073	0.0060
Mercury	-30562-12-16 03:50 J	-9440998.38	-9440998.34	-9440998.27	0.0073	0.0067
Venus	-30415-04-30 16:04 J	-9387535.87	-9387535.83	-9387535.79	0.0064	0.0063
Venus	-30415-12-11 19:26 J	-9387310.88	-9387310.69	-9387310.47	0.0065	0.0025
Venus	-30414-07-24 23:31 J	-9387085.73	-9387085.52	-9387085.31	0.0065	0.0015
Mars	-30414-12-14 23:31 J	-9386942.80	-9386942.52	-9386942.22	0.0065	0.0016
Venus	-30413-03-06 02:52 J	-9386860.47	-9386860.38	-9386860.24	0.0065	0.0056
Moon	-30407-06-16 12:57 J	-9384567.20	-9384566.96	-9384566.70	0.0068	0.0007
Earth	-30407-06-16 14:23 J	-9384567.16	-9384566.90	-9384566.64	0.0068	0.0003 *
Mercury	-30404-10-18 09:07 J	-9383347.16	-9383347.12	-9383347.05	0.0069	0.0065
Mercury	-30403-01-14 10:19 J	-9383259.13	-9383259.07	-9383258.96	0.0069	0.0059
Mercury	-30403-04-12 11:59 J	-9383171.10	-9383171.00	-9383170.88	0.0069	0.0052
Mercury	-30403-07-09 13:11 J	-9383083.06	-9383082.95	-9383082.81	0.0069	0.0046
Mercury	-30403-10-05 14:52 J	-9382995.01	-9382994.88	-9382994.74	0.0070	0.0039
Mercury	-30402-01-01 16:04 J	-9382906.96	-9382906.83	-9382906.67	0.0070	0.0033
Mercury	-30402-03-30 17:31 J	-9382818.91	-9382818.77	-9382818.61	0.0070	0.0026
Mercury	-30402-06-26 18:57 J	-9382730.86	-9382730.71	-9382730.54	0.0070	0.0019
Mercury	-30402-09-22 20:38 J	-9382642.81	-9382642.64	-9382642.48	0.0070	0.0012
Mercury	-30402-12-19 22:04 J	-9382554.75	-9382554.58	-9382554.42	0.0070	0.0005
Mercury	-30401-03-16 23:31 J	-9382466.69	-9382466.52	-9382466.35	0.0070	0.0001
Mercury	-30401-06-13 00:57 J	-9382378.63	-9382378.46	-9382378.29	0.0070	0.0008



Mercury	-30401-09-09 02:23 J	-9382290.56	-9382290.40	-9382290.24	0.0070	0.0015
Mercury	-30401-12-06 03:50 J	-9382202.49	-9382202.34	-9382202.18	0.0071	0.0022
Mercury	-30400-03-04 05:16 J	-9382114.43	-9382114.28	-9382114.12	0.0071	0.0030
Mercury	-30400-05-31 06:43 J	-9382026.35	-9382026.22	-9382026.07	0.0071	0.0037
Mercury	-30400-08-27 08:09 J	-9381938.28	-9381938.16	-9381938.02	0.0071	0.0044
Mercury	-30400-11-23 09:50 J	-9381850.20	-9381850.09	-9381849.97	0.0071	0.0051
Mercury	-30399-02-19 11:31 J	-9381762.11	-9381762.02	-9381761.92	0.0071	0.0059
Mercury	-30399-05-18 12:43 J	-9381674.01	-9381673.97	-9381673.89	0.0071	0.0066
Venus	-30326-03-26 21:07 J	-9355063.84	-9355063.62	-9355063.39	0.0079	0.0008
Mars	-30326-05-04 06:28 J	-9355025.28	-9355025.23	-9355025.09	0.0079	0.0077
Venus	-30326-11-07 07:40 J	-9354838.28	-9354838.18	-9354838.05	0.0079	0.0067
Earth	-30322-12-19 18:28 J	-9353334.87	-9353334.73	-9353334.58	0.0077	0.0062
Moon	-30322-12-19 21:07 J	-9353334.76	-9353334.62	-9353334.43	0.0077	0.0060 *
Moon	-30321-12-20 16:33 J	-9352967.91	-9352967.81	-9352967.68	0.0076	0.0068
Earth	-30321-12-20 18:57 J	-9352967.80	-9352967.71	-9352967.59	0.0076	0.0070 *
Mercury	-30319-12-19 13:55 J	-9352238.93	-9352238.92	-9352238.86	0.0075	0.0074
Mercury	-30318-03-17 15:21 J	-9352150.91	-9352150.86	-9352150.77	0.0075	0.0066
Mercury	-30318-06-13 17:02 J	-9352062.88	-9352062.79	-9352062.69	0.0075	0.0057
Mercury	-30318-09-09 18:28 J	-9351974.84	-9351974.73	-9351974.61	0.0075	0.0049
Mercury	-30318-12-06 19:40 J	-9351886.80	-9351886.68	-9351886.55	0.0075	0.0042
Mercury	-30317-03-03 21:07 J	-9351798.75	-9351798.62	-9351798.48	0.0075	0.0034
Mercury	-30317-05-30 22:19 J	-9351710.70	-9351710.57	-9351710.42	0.0074	0.0027
Mercury	-30317-08-26 23:45 J	-9351622.65	-9351622.51	-9351622.36	0.0074	0.0019
Mercury	-30317-11-23 01:11 J	-9351534.60	-9351534.45	-9351534.30	0.0074	0.0012
Mercury	-30316-02-19 02:23 J	-9351446.55	-9351446.40	-9351446.25	0.0074	0.0004
Mercury	-30316-05-18 03:35 J	-9351358.50	-9351358.35	-9351358.20	0.0074	0.0003
Mercury	-30316-08-14 04:47 J	-9351270.44	-9351270.30	-9351270.15	0.0074	0.0011
Mercury	-30316-11-10 05:59 J	-9351182.39	-9351182.25	-9351182.10	0.0074	0.0018
Mercury	-30315-02-06 07:11 J	-9351094.33	-9351094.20	-9351094.05	0.0073	0.0025
Mercury	-30315-05-05 08:23 J	-9351006.28	-9351006.15	-9351006.01	0.0073	0.0032

Mercury	-30315-08-01 09:35 J	-9350918.22	-9350918.10	-9350917.96	0.0073	0.0039
Mercury	-30315-10-28 10:47 J	-9350830.16	-9350830.05	-9350829.92	0.0073	0.0046
Mercury	-30314-01-24 11:59 J	-9350742.09	-9350742.00	-9350741.89	0.0073	0.0052
Mercury	-30314-04-22 13:11 J	-9350654.03	-9350653.95	-9350653.86	0.0073	0.0059
Mercury	-30314-07-19 14:09 J	-9350565.96	-9350565.91	-9350565.83	0.0073	0.0066
Mercury	-30314-10-15 15:21 J	-9350477.86	-9350477.86	-9350477.83	0.0073	0.0072
Venus	-30167-04-03 11:02 J	-9296981.23	-9296981.04	-9296980.83	0.0065	0.0027
Venus	-30167-11-14 14:52 J	-9296756.08	-9296755.88	-9296755.66	0.0065	0.0013
Venus	-30166-06-27 18:57 J	-9296530.83	-9296530.71	-9296530.58	0.0065	0.0052
Saturn	-30164-10-15 01:40 J	-9295691.12	-9295690.43	-9295689.67	0.0066	0.0011
Moon	-30160-06-17 05:02 J	-9294349.48	-9294349.29	-9294349.07	0.0067	0.0039
Earth	-30160-06-17 07:11 J	-9294349.39	-9294349.20	-9294348.96	0.0067	0.0039 *
Earth	-30159-06-18 22:33 J	-9293982.69	-9293982.56	-9293982.37	0.0068	0.0053
Moon	-30159-06-18 23:45 J	-9293982.68	-9293982.51	-9293982.34	0.0068	0.0052 *
Mercury	-30156-05-21 20:09 J	-9292914.71	-9292914.66	-9292914.59	0.0069	0.0064
Mercury	-30156-08-17 21:21 J	-9292826.69	-9292826.61	-9292826.51	0.0069	0.0057
Mercury	-30156-11-13 23:02 J	-9292738.65	-9292738.54	-9292738.43	0.0069	0.0051
Mercury	-30155-02-09 23:59 J	-9292650.61	-9292650.50	-9292650.36	0.0070	0.0045
Mercury	-30155-05-09 01:40 J	-9292562.56	-9292562.43	-9292562.29	0.0070	0.0038
Mercury	-30155-08-05 02:52 J	-9292474.51	-9292474.38	-9292474.22	0.0070	0.0032
Mercury	-30155-11-01 04:19 J	-9292386.46	-9292386.32	-9292386.15	0.0070	0.0025
Mercury	-30154-01-28 05:45 J	-9292298.41	-9292298.26	-9292298.09	0.0070	0.0018
Mercury	-30154-04-26 07:26 J	-9292210.35	-9292210.19	-9292210.03	0.0070	0.0011
Mercury	-30154-07-23 08:52 J	-9292122.30	-9292122.13	-9292121.96	0.0070	0.0004
Mercury	-30154-10-19 10:19 J	-9292034.23	-9292034.07	-9292033.90	0.0070	0.0003
Mercury	-30153-01-15 11:45 J	-9291946.17	-9291946.01	-9291945.84	0.0070	0.0010
Mercury	-30153-04-12 13:11 J	-9291858.11	-9291857.95	-9291857.78	0.0071	0.0017
Mercury	-30153-07-09 14:38 J	-9291770.04	-9291769.89	-9291769.73	0.0071	0.0024
Mercury	-30153-10-05 16:04 J	-9291681.97	-9291681.83	-9291681.67	0.0071	0.0031
Mercury	-30152-01-01 17:45 J	-9291593.90	-9291593.76	-9291593.62	0.0071	0.0038

Mercury	-30152-03-30 19:11 J	-9291505.82	-9291505.70	-9291505.57	0.0071	0.0045
Mercury	-30152-06-26 20:23 J	-9291417.74	-9291417.65	-9291417.52	0.0071	0.0053
Mercury	-30152-09-22 22:04 J	-9291329.65	-9291329.58	-9291329.48	0.0071	0.0061
Mercury	-30152-12-19 23:45 J	-9291241.55	-9291241.51	-9291241.45	0.0071	0.0068
Venus	-30079-07-17 11:45 J	-9264734.23	-9264734.01	-9264733.78	0.0079	0.0009
Venus	-30078-02-27 22:04 J	-9264508.68	-9264508.58	-9264508.44	0.0079	0.0066
Moon	-30074-12-22 07:40 J	-9262750.42	-9262750.18	-9262749.93	0.0076	0.0022
Earth	-30074-12-22 11:02 J	-9262750.28	-9262750.04	-9262749.78	0.0076	0.0018 *
Mercury	-30071-07-23 01:40 J	-9261806.48	-9261806.43	-9261806.36	0.0075	0.0069
Mercury	-30071-10-19 03:21 J	-9261718.45	-9261718.36	-9261718.28	0.0075	0.0061
Mercury	-30070-01-15 04:19 J	-9261630.41	-9261630.32	-9261630.20	0.0075	0.0054
Mercury	-30070-04-13 05:45 J	-9261542.37	-9261542.26	-9261542.13	0.0075	0.0046
Mercury	-30070-07-10 06:57 J	-9261454.32	-9261454.21	-9261454.07	0.0075	0.0039
Mercury	-30070-10-06 08:23 J	-9261366.28	-9261366.15	-9261366.00	0.0074	0.0031
Mercury	-30069-01-02 09:50 J	-9261278.23	-9261278.09	-9261277.94	0.0074	0.0023
Mercury	-30069-03-30 11:16 J	-9261190.18	-9261190.03	-9261189.88	0.0074	0.0016
Mercury	-30069-06-26 12:28 J	-9261102.13	-9261101.98	-9261101.83	0.0074	0.0008
Mercury	-30069-09-22 13:40 J	-9261014.08	-9261013.93	-9261013.78	0.0074	0.0002
Mercury	-30069-12-19 14:52 J	-9260926.02	-9260925.88	-9260925.72	0.0074	0.0007
Mercury	-30068-03-17 16:04 J	-9260837.97	-9260837.83	-9260837.67	0.0074	0.0014
Mercury	-30068-06-13 17:31 J	-9260749.91	-9260749.77	-9260749.63	0.0074	0.0021
Mercury	-30068-09-09 18:43 J	-9260661.86	-9260661.72	-9260661.58	0.0073	0.0028
Mercury	-30068-12-06 19:55 J	-9260573.80	-9260573.67	-9260573.54	0.0073	0.0035
Mercury	-30067-03-04 21:07 J	-9260485.74	-9260485.62	-9260485.50	0.0073	0.0042
Mercury	-30067-05-31 22:19 J	-9260397.68	-9260397.57	-9260397.46	0.0073	0.0048
Mercury	-30067-08-27 23:31 J	-9260309.62	-9260309.52	-9260309.42	0.0073	0.0055
Mercury	-30067-11-24 00:28 J	-9260221.55	-9260221.48	-9260221.40	0.0073	0.0062
Mercury	-30066-02-20 01:26 J	-9260133.47	-9260133.44	-9260133.38	0.0073	0.0069

# 30TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 30th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-29921-12-12 00:43 J		-9206876.53	-9206876.47	-9206876.39	0.0064	0.0061	
Venus	-29920-07-25 04:19 J		-9206651.51	-9206651.32	-9206651.10	0.0065	0.0023	
Jupiter	-29920-11-05 01:11 J		-9206548.94	-9206548.45	-9206547.88	0.0065	0.0022	
Venus	-29919-03-07 08:23 J		-9206426.35	-9206426.15	-9206425.93	0.0065	0.0017	
Mars	-29919-08-14 00:14 J		-9206266.79	-9206266.49	-9206266.19	0.0065	0.0006	
Venus	-29919-10-18 11:45 J		-9206201.09	-9206201.01	-9206200.88	0.0065	0.0057	
Earth	-29912-06-19 19:26 J		-9203764.93	-9203764.69	-9203764.44	0.0068	0.0020	
Moon	-29912-06-19 21:21 J		-9203764.84	-9203764.61	-9203764.34	0.0068	0.0023	*
Mercury	-29909-09-26 06:14 J		-9202570.27	-9202570.24	-9202570.19	0.0069	0.0067	
Mercury	-29909-12-23 07:26 J		-9202482.25	-9202482.19	-9202482.09	0.0069	0.0061	
Mercury	-29908-03-21 09:07 J		-9202394.22	-9202394.12	-9202394.01	0.0069	0.0054	
Mercury	-29908-06-17 10:19 J		-9202306.18	-9202306.07	-9202305.94	0.0070	0.0048	
Mercury	-29908-09-13 11:45 J		-9202218.13	-9202218.01	-9202217.87	0.0070	0.0041	
Mercury	-29908-12-10 13:26 J		-9202130.09	-9202129.94	-9202129.80	0.0070	0.0034	
Mercury	-29907-03-08 14:38 J		-9202042.04	-9202041.89	-9202041.73	0.0070	0.0028	
Mercury	-29907-06-04 16:04 J		-9201953.98	-9201953.83	-9201953.67	0.0070	0.0021	
Mercury	-29907-08-31 17:31 J		-9201865.93	-9201865.77	-9201865.60	0.0070	0.0014	
Mercury	-29907-11-27 18:57 J		-9201777.87	-9201777.71	-9201777.54	0.0070	0.0008	
Mercury	-29906-02-23 20:38 J		-9201689.81	-9201689.64	-9201689.48	0.0070	0.0002	

Mercury	-29906-05-22 22:04 J	-9201601.75	-9201601.58	-9201601.42	0.0070	0.0007
Mercury	-29906-08-18 23:16 J	-9201513.69	-9201513.53	-9201513.36	0.0071	0.0014
Mercury	-29906-11-15 00:43 J	-9201425.62	-9201425.47	-9201425.30	0.0071	0.0021
Mercury	-29905-02-11 02:23 J	-9201337.55	-9201337.40	-9201337.24	0.0071	0.0028
Mercury	-29905-05-09 03:50 J	-9201249.48	-9201249.34	-9201249.19	0.0071	0.0035
Mercury	-29905-08-05 05:31 J	-9201161.40	-9201161.27	-9201161.14	0.0071	0.0042
Mercury	-29905-11-01 06:43 J	-9201073.32	-9201073.22	-9201073.09	0.0071	0.0050
Mercury	-29904-01-28 08:09 J	-9200985.24	-9200985.16	-9200985.04	0.0071	0.0058
Mercury	-29904-04-26 10:04 J	-9200897.14	-9200897.08	-9200897.01	0.0071	0.0065
Venus	-29832-11-07 03:50 J	-9174404.57	-9174404.34	-9174404.12	0.0079	0.0005
Venus	-29831-06-20 14:23 J	-9174178.99	-9174178.90	-9174178.80	0.0079	0.0071
Moon	-29827-12-23 01:11 J	-9172532.68	-9172532.45	-9172532.21	0.0077	0.0031
Earth	-29827-12-23 04:33 J	-9172532.53	-9172532.31	-9172532.05	0.0077	0.0030 *
Mercury	-29824-11-27 12:28 J	-9171462.02	-9171461.98	-9171461.94	0.0075	0.0073
Mercury	-29823-02-23 13:26 J	-9171374.00	-9171373.94	-9171373.85	0.0075	0.0065
Mercury	-29823-05-22 14:52 J	-9171285.96	-9171285.88	-9171285.77	0.0075	0.0057
Mercury	-29823-08-18 16:33 J	-9171197.92	-9171197.81	-9171197.70	0.0075	0.0049
Mercury	-29823-11-14 17:31 J	-9171109.88	-9171109.77	-9171109.63	0.0075	0.0042
Mercury	-29822-02-10 19:11 J	-9171021.83	-9171021.70	-9171021.56	0.0074	0.0034
Mercury	-29822-05-09 20:23 J	-9170933.79	-9170933.65	-9170933.50	0.0074	0.0026
Mercury	-29822-08-05 21:50 J	-9170845.74	-9170845.59	-9170845.44	0.0074	0.0019
Mercury	-29822-11-01 23:02 J	-9170757.69	-9170757.54	-9170757.39	0.0074	0.0011
Mercury	-29821-01-29 00:28 J	-9170669.63	-9170669.48	-9170669.33	0.0074	0.0004
Mercury	-29821-04-26 01:40 J	-9170581.58	-9170581.43	-9170581.28	0.0074	0.0004
Mercury	-29821-07-23 02:52 J	-9170493.53	-9170493.38	-9170493.23	0.0074	0.0011
Mercury	-29821-10-19 04:04 J	-9170405.47	-9170405.33	-9170405.18	0.0074	0.0018
Mercury	-29820-01-15 05:02 J	-9170317.42	-9170317.29	-9170317.14	0.0073	0.0026
Mercury	-29820-04-13 06:14 J	-9170229.36	-9170229.24	-9170229.09	0.0073	0.0033
Mercury	-29820-07-10 07:26 J	-9170141.30	-9170141.19	-9170141.05	0.0073	0.0039
Mercury	-29820-10-06 08:38 J	-9170053.24	-9170053.14	-9170053.01	0.0073	0.0046

Mercury	-29819-01-02 09:50 J	-9169965.18	-9169965.09	-9169964.98	0.0073	0.0053
Mercury	-29819-03-31 10:47 J	-9169877.11	-9169877.05	-9169876.94	0.0073	0.0060
Mercury	-29819-06-27 12:28 J	-9169789.04	-9169788.98	-9169788.92	0.0073	0.0066
Venus	-29673-04-03 18:28 J	-9116546.83	-9116546.73	-9116546.58	0.0064	0.0054
Venus	-29673-11-14 22:33 J	-9116321.76	-9116321.56	-9116321.34	0.0065	0.0015
Venus	-29672-06-28 02:09 J	-9116096.59	-9116096.41	-9116096.19	0.0065	0.0025
Venus	-29671-02-08 06:14 J	-9115871.26	-9115871.24	-9115871.20	0.0065	0.0065
Earth	-29665-06-20 17:45 J	-9113547.02	-9113546.76	-9113546.50	0.0068	0.0007
Moon	-29665-06-20 20:52 J	-9113546.87	-9113546.63	-9113546.36	0.0068	0.0011 *
Mercury	-29661-02-01 16:47 J	-9112225.81	-9112225.80	-9112225.75	0.0069	0.0068
Mercury	-29661-04-29 18:14 J	-9112137.80	-9112137.74	-9112137.65	0.0069	0.0062
Mercury	-29661-07-26 19:26 J	-9112049.77	-9112049.69	-9112049.57	0.0069	0.0056
Mercury	-29661-10-22 21:07 J	-9111961.73	-9111961.62	-9111961.49	0.0070	0.0049
Mercury	-29660-01-18 22:33 J	-9111873.68	-9111873.56	-9111873.42	0.0070	0.0042
Mercury	-29660-04-16 23:45 J	-9111785.64	-9111785.51	-9111785.35	0.0070	0.0036
Mercury	-29660-07-14 01:11 J	-9111697.59	-9111697.45	-9111697.29	0.0070	0.0029
Mercury	-29660-10-10 02:52 J	-9111609.53	-9111609.38	-9111609.22	0.0070	0.0022
Mercury	-29659-01-06 04:19 J	-9111521.48	-9111521.32	-9111521.16	0.0070	0.0015
Mercury	-29659-04-04 05:45 J	-9111433.42	-9111433.26	-9111433.09	0.0070	0.0008
Mercury	-29659-07-01 07:11 J	-9111345.36	-9111345.20	-9111345.03	0.0070	0.0002
Mercury	-29659-09-27 08:38 J	-9111257.30	-9111257.14	-9111256.97	0.0071	0.0006
Mercury	-29659-12-24 10:04 J	-9111169.24	-9111169.08	-9111168.91	0.0071	0.0013
Mercury	-29658-03-22 11:31 J	-9111081.17	-9111081.02	-9111080.85	0.0071	0.0020
Mercury	-29658-06-18 13:11 J	-9110993.10	-9110992.95	-9110992.79	0.0071	0.0027
Mercury	-29658-09-14 14:38 J	-9110905.03	-9110904.89	-9110904.74	0.0071	0.0034
Mercury	-29658-12-11 16:19 J	-9110816.96	-9110816.82	-9110816.68	0.0071	0.0041
Mercury	-29657-03-08 17:31 J	-9110728.88	-9110728.77	-9110728.63	0.0071	0.0049
Mercury	-29657-06-04 19:11 J	-9110640.79	-9110640.70	-9110640.59	0.0071	0.0056
Mercury	-29657-08-31 20:52 J	-9110552.70	-9110552.63	-9110552.55	0.0071	0.0064
Mercury	-29657-11-27 22:19 J	-9110464.57	-9110464.57	-9110464.55	0.0072	0.0072

Venus	-29585-07-17 11:45 J	-9084300.14	-9084300.01	-9084299.87	0.0080	0.0064
Venus	-29584-02-27 22:33 J	-9084074.77	-9084074.56	-9084074.33	0.0079	0.0013
Moon	-29580-12-23 23:31 J	-9082314.65	-9082314.52	-9082314.36	0.0077	0.0064
Earth	-29580-12-24 02:52 J	-9082314.51	-9082314.38	-9082314.21	0.0077	0.0062 *
Earth	-29579-12-26 03:07 J	-9081947.43	-9081947.37	-9081947.24	0.0076	0.0072
Moon	-29579-12-26 06:28 J	-9081947.26	-9081947.23	-9081947.12	0.0076	0.0074 *
Mercury	-29576-04-03 23:31 J	-9081117.54	-9081117.52	-9081117.46	0.0075	0.0073
Mercury	-29576-07-01 01:11 J	-9081029.52	-9081029.45	-9081029.37	0.0075	0.0064
Mercury	-29576-09-27 02:38 J	-9080941.49	-9080941.39	-9080941.29	0.0075	0.0056
Mercury	-29576-12-24 03:35 J	-9080853.45	-9080853.35	-9080853.22	0.0075	0.0049
Mercury	-29575-03-22 05:16 J	-9080765.40	-9080765.28	-9080765.15	0.0075	0.0041
Mercury	-29575-06-18 06:43 J	-9080677.36	-9080677.22	-9080677.09	0.0074	0.0033
Mercury	-29575-09-14 07:55 J	-9080589.31	-9080589.17	-9080589.03	0.0074	0.0025
Mercury	-29575-12-11 09:07 J	-9080501.26	-9080501.12	-9080500.97	0.0074	0.0018
Mercury	-29574-03-09 10:33 J	-9080413.21	-9080413.06	-9080412.91	0.0074	0.0010
Mercury	-29574-06-05 11:45 J	-9080325.16	-9080325.01	-9080324.86	0.0074	0.0003
Mercury	-29574-09-01 12:57 J	-9080237.11	-9080236.96	-9080236.80	0.0074	0.0005
Mercury	-29574-11-28 14:09 J	-9080149.05	-9080148.91	-9080148.75	0.0074	0.0012
Mercury	-29573-02-24 15:35 J	-9080061.00	-9080060.85	-9080060.71	0.0074	0.0019
Mercury	-29573-05-22 16:33 J	-9079972.94	-9079972.81	-9079972.66	0.0073	0.0026
Mercury	-29573-08-18 17:45 J	-9079884.88	-9079884.76	-9079884.62	0.0073	0.0033
Mercury	-29573-11-14 18:57 J	-9079796.83	-9079796.71	-9079796.58	0.0073	0.0040
Mercury	-29572-02-10 20:09 J	-9079708.76	-9079708.66	-9079708.54	0.0073	0.0047
Mercury	-29572-05-09 21:07 J	-9079620.70	-9079620.62	-9079620.50	0.0073	0.0054
Mercury	-29572-08-05 22:19 J	-9079532.63	-9079532.57	-9079532.47	0.0073	0.0061
Mercury	-29572-11-01 23:45 J	-9079444.56	-9079444.51	-9079444.45	0.0073	0.0067
Venus	-29426-07-26 15:07 J	-9026217.03	-9026216.87	-9026216.69	0.0064	0.0039
Venus	-29425-03-07 18:57 J	-9025991.92	-9025991.71	-9025991.49	0.0065	0.0002
Venus	-29425-10-18 22:33 J	-9025766.72	-9025766.56	-9025766.37	0.0065	0.0039
Mars	-29424-04-13 17:59 J	-9025590.04	-9025589.75	-9025589.44	0.0065	0.0009

Earth	-29418-06-22 18:57 J	-9023328.92	-9023328.71	-9023328.44	0.0068	0.0026
Moon	-29418-06-22 23:02 J	-9023328.77	-9023328.54	-9023328.29	0.0068	0.0024 *
Moon	-29417-06-23 07:55 J	-9022962.19	-9022962.17	-9022962.12	0.0068	0.0068
Earth	-29417-06-23 10:47 J	-9022962.05	-9022962.05	-9022962.00	0.0068	0.0068
Mercury	-29414-06-09 04:47 J	-9021881.34	-9021881.30	-9021881.25	0.0069	0.0067
Mercury	-29414-09-05 05:45 J	-9021793.32	-9021793.26	-9021793.16	0.0069	0.0061
Mercury	-29414-12-02 07:26 J	-9021705.28	-9021705.19	-9021705.08	0.0070	0.0054
Mercury	-29413-02-28 08:52 J	-9021617.24	-9021617.13	-9021617.00	0.0070	0.0047
Mercury	-29413-05-26 10:04 J	-9021529.20	-9021529.08	-9021528.93	0.0070	0.0041
Mercury	-29413-08-22 11:31 J	-9021441.15	-9021441.02	-9021440.87	0.0070	0.0034
Mercury	-29413-11-18 12:57 J	-9021353.10	-9021352.96	-9021352.80	0.0070	0.0027
Mercury	-29412-02-14 14:23 J	-9021265.05	-9021264.90	-9021264.73	0.0070	0.0021
Mercury	-29412-05-13 16:04 J	-9021177.00	-9021176.83	-9021176.67	0.0070	0.0014
Mercury	-29412-08-09 17:31 J	-9021088.94	-9021088.77	-9021088.61	0.0070	0.0007
Mercury	-29412-11-05 18:57 J	-9021000.88	-9021000.71	-9021000.55	0.0070	0.0001
Mercury	-29411-02-01 20:23 J	-9020912.82	-9020912.65	-9020912.49	0.0071	0.0007
Mercury	-29411-04-30 21:35 J	-9020824.75	-9020824.60	-9020824.43	0.0071	0.0015
Mercury	-29411-07-27 23:02 J	-9020736.69	-9020736.54	-9020736.37	0.0071	0.0022
Mercury	-29411-10-24 00:43 J	-9020648.62	-9020648.47	-9020648.31	0.0071	0.0029
Mercury	-29410-01-20 02:09 J	-9020560.55	-9020560.41	-9020560.26	0.0071	0.0036
Mercury	-29410-04-18 03:50 J	-9020472.47	-9020472.34	-9020472.21	0.0071	0.0044
Mercury	-29410-07-15 05:02 J	-9020384.39	-9020384.29	-9020384.16	0.0071	0.0051
Mercury	-29410-10-11 06:43 J	-9020296.30	-9020296.22	-9020296.11	0.0071	0.0059
Mercury	-29409-01-07 08:38 J	-9020208.20	-9020208.14	-9020208.08	0.0072	0.0066
Venus	-29338-11-08 07:40 J	-8993970.35	-8993970.18	-8993969.97	0.0080	0.0043
Venus	-29337-06-20 18:43 J	-8993744.92	-8993744.72	-8993744.51	0.0079	0.0034
Mars	-29337-08-30 14:38 J	-8993674.10	-8993673.89	-8993673.65	0.0079	0.0058
Earth	-29332-12-27 03:07 J	-8991729.57	-8991729.37	-8991729.15	0.0076	0.0044
Moon	-29332-12-27 05:45 J	-8991729.46	-8991729.26	-8991729.03	0.0076	0.0040 *
Mercury	-29329-08-09 11:16 J	-8990773.06	-8990773.03	-8990772.96	0.0075	0.0071



Mercury	-29329-11-05 12:43 J	-8990685.04	-8990684.97	-8990684.87	0.0075	0.0063
Mercury	-29328-02-01 14:09 J	-8990597.00	-8990596.91	-8990596.80	0.0075	0.0055
Mercury	-29328-04-30 15:35 J	-8990508.96	-8990508.85	-8990508.73	0.0075	0.0047
Mercury	-29328-07-27 16:47 J	-8990420.92	-8990420.80	-8990420.66	0.0074	0.0040
Mercury	-29328-10-23 18:14 J	-8990332.87	-8990332.74	-8990332.60	0.0074	0.0032
Mercury	-29327-01-19 19:26 J	-8990244.82	-8990244.69	-8990244.54	0.0074	0.0024
Mercury	-29327-04-17 20:52 J	-8990156.77	-8990156.63	-8990156.48	0.0074	0.0016
Mercury	-29327-07-14 22:19 J	-8990068.72	-8990068.57	-8990068.42	0.0074	0.0009
Mercury	-29327-10-10 23:31 J	-8989980.67	-8989980.52	-8989980.37	0.0074	0.0002
Mercury	-29326-01-07 00:43 J	-8989892.62	-8989892.47	-8989892.32	0.0074	0.0006
Mercury	-29326-04-05 01:55 J	-8989804.56	-8989804.42	-8989804.27	0.0074	0.0013
Mercury	-29326-07-02 03:07 J	-8989716.51	-8989716.37	-8989716.22	0.0073	0.0020
Mercury	-29326-09-28 04:19 J	-8989628.45	-8989628.32	-8989628.17	0.0073	0.0028
Mercury	-29326-12-25 05:31 J	-8989540.39	-8989540.27	-8989540.13	0.0073	0.0035
Mercury	-29325-03-22 06:43 J	-8989452.34	-8989452.22	-8989452.09	0.0073	0.0041
Mercury	-29325-06-18 07:55 J	-8989364.27	-8989364.17	-8989364.05	0.0073	0.0048
Mercury	-29325-09-14 09:07 J	-8989276.21	-8989276.12	-8989276.02	0.0073	0.0055
Mercury	-29325-12-11 10:19 J	-8989188.14	-8989188.07	-8989187.99	0.0073	0.0062
Mercury	-29324-03-09 11:16 J	-8989100.06	-8989100.03	-8989099.97	0.0073	0.0069
Venus	-29179-04-05 08:52 J	-8936112.20	-8936112.13	-8936112.00	0.0064	0.0058
Venus	-29179-11-16 12:57 J	-8935887.15	-8935886.96	-8935886.74	0.0065	0.0019
Venus	-29178-06-29 16:33 J	-8935662.00	-8935661.81	-8935661.58	0.0065	0.0021
Venus	-29177-02-09 20:09 J	-8935436.71	-8935436.66	-8935436.55	0.0065	0.0060
Earth	-29171-06-24 00:14 J	-8933110.71	-8933110.49	-8933110.26	0.0068	0.0033
Moon	-29171-06-24 02:38 J	-8933110.59	-8933110.39	-8933110.14	0.0068	0.0032 *
Moon	-29170-06-25 12:14 J	-8932744.11	-8932743.99	-8932743.83	0.0068	0.0057
Earth	-29170-06-25 15:35 J	-8932743.95	-8932743.85	-8932743.70	0.0068	0.0060 *
Mercury	-29167-07-18 16:04 J	-8931624.85	-8931624.83	-8931624.81	0.0069	0.0069
Mercury	-29167-10-14 17:02 J	-8931536.84	-8931536.79	-8931536.70	0.0070	0.0063
Mercury	-29166-01-10 18:28 J	-8931448.81	-8931448.73	-8931448.62	0.0070	0.0056

Mercury	-29166-04-08 20:09 J	-8931360.77	-8931360.66	-8931360.54	0.0070	0.0049
Mercury	-29166-07-05 21:21 J	-8931272.73	-8931272.61	-8931272.47	0.0070	0.0043
Mercury	-29166-10-01 22:47 J	-8931184.68	-8931184.55	-8931184.40	0.0070	0.0036
Mercury	-29166-12-29 00:14 J	-8931096.63	-8931096.49	-8931096.34	0.0070	0.0029
Mercury	-29165-03-26 01:40 J	-8931008.58	-8931008.43	-8931008.27	0.0070	0.0022
Mercury	-29165-06-22 03:07 J	-8930920.53	-8930920.37	-8930920.21	0.0070	0.0016
Mercury	-29165-09-18 04:33 J	-8930832.47	-8930832.31	-8930832.14	0.0070	0.0009
Mercury	-29165-12-15 05:59 J	-8930744.41	-8930744.25	-8930744.08	0.0071	0.0002
Mercury	-29164-03-13 07:26 J	-8930656.35	-8930656.19	-8930656.02	0.0071	0.0006
Mercury	-29164-06-09 08:52 J	-8930568.29	-8930568.13	-8930567.96	0.0071	0.0013
Mercury	-29164-09-05 10:19 J	-8930480.22	-8930480.07	-8930479.90	0.0071	0.0020
Mercury	-29164-12-02 11:45 J	-8930392.15	-8930392.01	-8930391.85	0.0071	0.0027
Mercury	-29163-02-28 13:26 J	-8930304.08	-8930303.94	-8930303.79	0.0071	0.0034
Mercury	-29163-05-27 14:38 J	-8930216.01	-8930215.89	-8930215.74	0.0071	0.0042
Mercury	-29163-08-23 16:19 J	-8930127.93	-8930127.82	-8930127.69	0.0071	0.0049
Mercury	-29163-11-19 17:59 J	-8930039.85	-8930039.75	-8930039.64	0.0071	0.0057
Mercury	-29162-02-15 19:11 J	-8929951.75	-8929951.70	-8929951.61	0.0072	0.0065
Venus	-29091-07-18 21:21 J	-8903865.61	-8903865.61	-8903865.59	0.0080	0.0080
Venus	-29090-03-01 08:23 J	-8903640.37	-8903640.15	-8903639.92	0.0080	0.0004
Venus	-29090-10-12 18:57 J	-8903414.78	-8903414.71	-8903414.60	0.0079	0.0073
Earth	-29085-12-28 08:38 J	-8901511.34	-8901511.14	-8901510.89	0.0076	0.0037
Moon	-29085-12-28 10:19 J	-8901511.27	-8901511.07	-8901510.84	0.0076	0.0040 *
Mercury	-29082-09-18 23:02 J	-8900516.57	-8900516.54	-8900516.49	0.0075	0.0072
Mercury	-29082-12-16 00:28 J	-8900428.55	-8900428.48	-8900428.39	0.0075	0.0064
Mercury	-29081-03-13 01:55 J	-8900340.51	-8900340.42	-8900340.31	0.0075	0.0056
Mercury	-29081-06-09 03:07 J	-8900252.47	-8900252.37	-8900252.24	0.0075	0.0049
Mercury	-29081-09-05 04:33 J	-8900164.43	-8900164.31	-8900164.17	0.0074	0.0041
Mercury	-29081-12-02 06:14 J	-8900076.38	-8900076.24	-8900076.11	0.0074	0.0033
Mercury	-29080-02-28 07:11 J	-8899988.33	-8899988.20	-8899988.05	0.0074	0.0026
Mercury	-29080-05-27 08:38 J	-8899900.28	-8899900.14	-8899899.99	0.0074	0.0018

Mercury	-29080-08-23 10:04 J	-8899812.23	-8899812.08	-8899811.93	0.0074	0.0010
Mercury	-29080-11-19 11:16 J	-8899724.18	-8899724.03	-8899723.88	0.0074	0.0003
Mercury	-29079-02-15 12:28 J	-8899636.13	-8899635.98	-8899635.83	0.0074	0.0005
Mercury	-29079-05-14 13:40 J	-8899548.07	-8899547.93	-8899547.78	0.0074	0.0012
Mercury	-29079-08-10 14:52 J	-8899460.02	-8899459.88	-8899459.73	0.0073	0.0019
Mercury	-29079-11-06 16:04 J	-8899371.96	-8899371.83	-8899371.68	0.0073	0.0027
Mercury	-29078-02-02 17:16 J	-8899283.91	-8899283.78	-8899283.64	0.0073	0.0034
Mercury	-29078-05-01 18:28 J	-8899195.85	-8899195.73	-8899195.60	0.0073	0.0041
Mercury	-29078-07-28 19:40 J	-8899107.79	-8899107.68	-8899107.56	0.0073	0.0047
Mercury	-29078-10-24 20:52 J	-8899019.72	-8899019.63	-8899019.53	0.0073	0.0054
Mercury	-29077-01-20 22:04 J	-8898931.66	-8898931.58	-8898931.50	0.0073	0.0061
Mercury	-29077-04-17 23:02 J	-8898843.58	-8898843.54	-8898843.48	0.0073	0.0068

# 29TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 29th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-28932-07-27 09:50 J	-8845782.27	-8845782.09	-8845781.87	0.0065	0.0028		
Venus	-28931-03-09 13:55 J	-8845557.12	-8845556.92	-8845556.70	0.0065	0.0012		
Venus	-28931-10-20 17:31 J	-8845331.88	-8845331.77	-8845331.62	0.0065	0.0051		
Earth	-28924-06-25 10:33 J	-8842892.29	-8842892.06	-8842891.81	0.0068	0.0027		
Moon	-28924-06-25 12:14 J	-8842892.21	-8842891.99	-8842891.76	0.0068	0.0030	*	
Earth	-28923-06-27 02:38 J	-8842525.44	-8842525.39	-8842525.33	0.0068	0.0066		

Mercury	-28920-08-27 04:47 J	-8841368.34	-8841368.30	-8841368.26	0.0069	0.0067
Mercury	-28920-11-23 05:45 J	-8841280.32	-8841280.26	-8841280.17	0.0070	0.0061
Mercury	-28919-02-19 07:11 J	-8841192.29	-8841192.20	-8841192.09	0.0070	0.0054
Mercury	-28919-05-18 08:23 J	-8841104.25	-8841104.15	-8841104.01	0.0070	0.0048
Mercury	-28919-08-14 09:50 J	-8841016.21	-8841016.09	-8841015.94	0.0070	0.0041
Mercury	-28919-11-10 11:16 J	-8840928.16	-8840928.03	-8840927.87	0.0070	0.0034
Mercury	-28918-02-06 12:57 J	-8840840.11	-8840839.96	-8840839.80	0.0070	0.0027
Mercury	-28918-05-05 14:23 J	-8840752.06	-8840751.90	-8840751.74	0.0070	0.0020
Mercury	-28918-08-01 15:50 J	-8840664.00	-8840663.84	-8840663.68	0.0070	0.0013
Mercury	-28918-10-28 17:16 J	-8840575.94	-8840575.78	-8840575.61	0.0071	0.0006
Mercury	-28917-01-24 18:43 J	-8840487.88	-8840487.72	-8840487.55	0.0071	0.0001
Mercury	-28917-04-21 20:09 J	-8840399.82	-8840399.66	-8840399.49	0.0071	0.0008
Mercury	-28917-07-18 21:35 J	-8840311.76	-8840311.60	-8840311.43	0.0071	0.0015
Mercury	-28917-10-14 23:16 J	-8840223.69	-8840223.53	-8840223.38	0.0071	0.0022
Mercury	-28916-01-11 00:28 J	-8840135.62	-8840135.48	-8840135.32	0.0071	0.0030
Mercury	-28916-04-09 01:55 J	-8840047.55	-8840047.42	-8840047.27	0.0071	0.0037
Mercury	-28916-07-06 03:35 J	-8839959.47	-8839959.35	-8839959.21	0.0071	0.0045
Mercury	-28916-10-02 04:47 J	-8839871.39	-8839871.30	-8839871.17	0.0071	0.0053
Mercury	-28916-12-29 06:28 J	-8839783.31	-8839783.23	-8839783.12	0.0072	0.0060
Mercury	-28915-03-27 07:55 J	-8839695.20	-8839695.17	-8839695.09	0.0072	0.0068
Venus	-28844-11-09 01:26 J	-8813535.64	-8813535.44	-8813535.22	0.0080	0.0027
Venus	-28843-06-22 11:59 J	-8813310.16	-8813310.00	-8813309.80	0.0079	0.0050
Moon	-28838-12-30 18:57 J	-8811292.89	-8811292.71	-8811292.48	0.0076	0.0044
Earth	-28838-12-30 19:11 J	-8811292.88	-8811292.70	-8811292.46	0.0076	0.0044 *
Mercury	-28835-10-28 11:31 J	-8810260.06	-8810260.02	-8810259.95	0.0075	0.0070
Mercury	-28834-01-24 12:57 J	-8810172.03	-8810171.96	-8810171.86	0.0075	0.0062
Mercury	-28834-04-22 14:38 J	-8810083.99	-8810083.89	-8810083.79	0.0075	0.0054
Mercury	-28834-07-19 15:35 J	-8809995.95	-8809995.85	-8809995.71	0.0074	0.0047
Mercury	-28834-10-15 17:02 J	-8809907.91	-8809907.79	-8809907.65	0.0074	0.0039
Mercury	-28833-01-11 18:14 J	-8809819.86	-8809819.74	-8809819.59	0.0074	0.0032

Mercury	-28833-04-08 19:55 J	-8809731.81	-8809731.67	-8809731.52	0.0074	0.0023
Mercury	-28833-07-05 21:07 J	-8809643.76	-8809643.62	-8809643.47	0.0074	0.0016
Mercury	-28833-10-01 22:33 J	-8809555.71	-8809555.56	-8809555.41	0.0074	0.0008
Mercury	-28833-12-28 23:45 J	-8809467.66	-8809467.51	-8809467.36	0.0074	0.0001
Mercury	-28832-03-27 00:57 J	-8809379.61	-8809379.46	-8809379.31	0.0074	0.0007
Mercury	-28832-06-23 02:23 J	-8809291.55	-8809291.40	-8809291.26	0.0073	0.0014
Mercury	-28832-09-19 03:21 J	-8809203.50	-8809203.36	-8809203.21	0.0073	0.0021
Mercury	-28832-12-16 04:33 J	-8809115.44	-8809115.31	-8809115.16	0.0073	0.0029
Mercury	-28831-03-14 05:45 J	-8809027.38	-8809027.26	-8809027.12	0.0073	0.0036
Mercury	-28831-06-10 07:11 J	-8808939.32	-8808939.20	-8808939.08	0.0073	0.0042
Mercury	-28831-09-06 08:23 J	-8808851.26	-8808851.15	-8808851.04	0.0073	0.0049
Mercury	-28831-12-03 09:21 J	-8808763.19	-8808763.11	-8808763.01	0.0073	0.0056
Mercury	-28830-03-01 10:33 J	-8808675.13	-8808675.06	-8808674.98	0.0073	0.0063
Mercury	-28830-05-28 11:31 J	-8808587.04	-8808587.02	-8808586.97	0.0072	0.0070
Venus	-28685-04-06 09:07 J	-8755677.29	-8755677.12	-8755676.90	0.0065	0.0029
Venus	-28685-11-17 13:11 J	-8755452.15	-8755451.95	-8755451.73	0.0065	0.0011
Venus	-28684-06-30 16:47 J	-8755226.92	-8755226.80	-8755226.64	0.0065	0.0050
Mars	-28683-05-05 03:50 J	-8754918.59	-8754918.34	-8754918.04	0.0065	0.0028
Moon	-28677-06-27 00:14 J	-8752673.73	-8752673.49	-8752673.23	0.0068	0.0006
Earth	-28677-06-27 01:11 J	-8752673.70	-8752673.45	-8752673.19	0.0068	0.0008 *
Mercury	-28673-07-09 16:47 J	-8751199.82	-8751199.80	-8751199.75	0.0070	0.0068
Mercury	-28673-10-05 17:59 J	-8751111.81	-8751111.75	-8751111.66	0.0070	0.0062
Mercury	-28672-01-01 19:26 J	-8751023.77	-8751023.69	-8751023.57	0.0070	0.0055
Mercury	-28672-03-30 20:52 J	-8750935.74	-8750935.63	-8750935.50	0.0070	0.0048
Mercury	-28672-06-26 22:33 J	-8750847.69	-8750847.56	-8750847.43	0.0070	0.0041
Mercury	-28672-09-22 23:31 J	-8750759.64	-8750759.52	-8750759.36	0.0070	0.0035
Mercury	-28672-12-20 00:57 J	-8750671.59	-8750671.46	-8750671.29	0.0070	0.0029
Mercury	-28671-03-18 02:38 J	-8750583.54	-8750583.39	-8750583.23	0.0070	0.0021
Mercury	-28671-06-14 04:04 J	-8750495.49	-8750495.33	-8750495.16	0.0070	0.0014
Mercury	-28671-09-10 05:31 J	-8750407.43	-8750407.27	-8750407.10	0.0071	0.0007

Mercury	-28671-12-07 07:11 J	-8750319.37	-8750319.20	-8750319.04	0.0071	0.0002
Mercury	-28670-03-05 08:23 J	-8750231.31	-8750231.15	-8750230.98	0.0071	0.0008
Mercury	-28670-06-01 09:50 J	-8750143.24	-8750143.09	-8750142.92	0.0071	0.0015
Mercury	-28670-08-28 11:16 J	-8750055.18	-8750055.03	-8750054.86	0.0071	0.0022
Mercury	-28670-11-24 12:57 J	-8749967.11	-8749966.96	-8749966.80	0.0071	0.0029
Mercury	-28669-02-20 14:23 J	-8749879.04	-8749878.90	-8749878.75	0.0071	0.0037
Mercury	-28669-05-18 15:50 J	-8749790.96	-8749790.84	-8749790.70	0.0071	0.0044
Mercury	-28669-08-14 17:31 J	-8749702.88	-8749702.77	-8749702.65	0.0072	0.0052
Mercury	-28669-11-10 18:43 J	-8749614.79	-8749614.72	-8749614.61	0.0072	0.0060
Mercury	-28668-02-06 20:38 J	-8749526.69	-8749526.64	-8749526.58	0.0072	0.0067
Venus	-28597-07-19 23:16 J	-8723430.72	-8723430.53	-8723430.30	0.0080	0.0027
Venus	-28596-03-02 10:19 J	-8723205.23	-8723205.07	-8723204.88	0.0079	0.0050
Mars	-28596-09-20 10:04 J	-8723003.41	-8723003.08	-8723002.75	0.0079	0.0002
Earth	-28592-12-30 13:26 J	-8721441.08	-8721440.94	-8721440.75	0.0077	0.0059
Moon	-28592-12-30 17:02 J	-8721440.94	-8721440.79	-8721440.59	0.0077	0.0057 *
Moon	-28590-01-01 11:45 J	-8721074.05	-8721074.01	-8721073.91	0.0076	0.0074
Earth	-28590-01-01 14:23 J	-8721073.92	-8721073.90	-8721073.86	0.0076	0.0076 *
Mercury	-28588-09-10 00:43 J	-8720091.52	-8720091.47	-8720091.41	0.0075	0.0069
Mercury	-28588-12-07 02:09 J	-8720003.49	-8720003.41	-8720003.32	0.0075	0.0061
Mercury	-28587-03-05 03:07 J	-8719915.46	-8719915.37	-8719915.25	0.0075	0.0054
Mercury	-28587-06-01 04:33 J	-8719827.42	-8719827.31	-8719827.18	0.0074	0.0046
Mercury	-28587-08-28 06:14 J	-8719739.37	-8719739.24	-8719739.11	0.0074	0.0038
Mercury	-28587-11-24 07:26 J	-8719651.32	-8719651.19	-8719651.05	0.0074	0.0030
Mercury	-28586-02-20 08:52 J	-8719563.28	-8719563.13	-8719562.99	0.0074	0.0022
Mercury	-28586-05-19 10:04 J	-8719475.23	-8719475.08	-8719474.93	0.0074	0.0015
Mercury	-28586-08-15 11:16 J	-8719387.17	-8719387.03	-8719386.87	0.0074	0.0008
Mercury	-28586-11-11 12:43 J	-8719299.12	-8719298.97	-8719298.82	0.0074	0.0000
Mercury	-28585-02-07 13:55 J	-8719211.07	-8719210.92	-8719210.77	0.0074	0.0007
Mercury	-28585-05-05 15:07 J	-8719123.01	-8719122.87	-8719122.72	0.0073	0.0015
Mercury	-28585-08-01 16:19 J	-8719034.96	-8719034.82	-8719034.67	0.0073	0.0022

Mercury	-28585-10-28 17:31 J	-8718946.90	-8718946.77	-8718946.63	0.0073	0.0029
Mercury	-28584-01-24 18:43 J	-8718858.84	-8718858.72	-8718858.58	0.0073	0.0036
Mercury	-28584-04-22 19:55 J	-8718770.78	-8718770.67	-8718770.54	0.0073	0.0043
Mercury	-28584-07-19 21:07 J	-8718682.72	-8718682.62	-8718682.51	0.0073	0.0050
Mercury	-28584-10-15 22:04 J	-8718594.66	-8718594.58	-8718594.47	0.0073	0.0057
Mercury	-28583-01-11 23:16 J	-8718506.59	-8718506.53	-8718506.45	0.0073	0.0064
Mercury	-28583-04-10 00:28 J	-8718418.50	-8718418.48	-8718418.43	0.0072	0.0070
Venus	-28439-05-05 06:57 J	-8665797.27	-8665797.21	-8665797.09	0.0064	0.0059
Venus	-28439-12-16 11:16 J	-8665572.23	-8665572.03	-8665571.82	0.0065	0.0020
Venus	-28438-07-29 14:52 J	-8665347.08	-8665346.88	-8665346.66	0.0065	0.0019
Venus	-28437-03-10 18:28 J	-8665121.80	-8665121.73	-8665121.61	0.0065	0.0058
Mars	-28437-09-24 03:50 J	-8664924.63	-8664924.34	-8664924.03	0.0065	0.0008
Moon	-28431-06-28 08:23 J	-8662821.15	-8662821.15	-8662821.10	0.0068	0.0067
Moon	-28430-06-29 17:45 J	-8662454.99	-8662454.76	-8662454.51	0.0068	0.0023
Earth	-28430-06-29 21:07 J	-8662454.86	-8662454.62	-8662454.38	0.0068	0.0024 *
Mercury	-28426-05-23 06:28 J	-8661031.28	-8661031.23	-8661031.17	0.0070	0.0065
Mercury	-28426-08-19 07:40 J	-8660943.25	-8660943.18	-8660943.08	0.0070	0.0059
Mercury	-28426-11-15 09:07 J	-8660855.22	-8660855.12	-8660855.00	0.0070	0.0052
Mercury	-28425-02-11 10:33 J	-8660767.17	-8660767.06	-8660766.93	0.0070	0.0045
Mercury	-28425-05-09 11:59 J	-8660679.13	-8660679.00	-8660678.86	0.0070	0.0038
Mercury	-28425-08-05 13:26 J	-8660591.08	-8660590.94	-8660590.79	0.0070	0.0032
Mercury	-28425-11-01 14:52 J	-8660503.03	-8660502.88	-8660502.72	0.0070	0.0025
Mercury	-28424-01-28 16:19 J	-8660414.97	-8660414.82	-8660414.65	0.0070	0.0018
Mercury	-28424-04-26 17:45 J	-8660326.92	-8660326.76	-8660326.59	0.0071	0.0011
Mercury	-28424-07-23 19:26 J	-8660238.86	-8660238.69	-8660238.53	0.0071	0.0004
Mercury	-28424-10-19 20:52 J	-8660150.80	-8660150.63	-8660150.47	0.0071	0.0004
Mercury	-28423-01-15 22:04 J	-8660062.73	-8660062.58	-8660062.41	0.0071	0.0011
Mercury	-28423-04-13 23:45 J	-8659974.67	-8659974.51	-8659974.35	0.0071	0.0018
Mercury	-28423-07-11 01:11 J	-8659886.60	-8659886.45	-8659886.29	0.0071	0.0025
Mercury	-28423-10-07 02:23 J	-8659798.53	-8659798.40	-8659798.24	0.0071	0.0034

Mercury	-28422-01-03 04:04 J	-8659710.46	-8659710.33	-8659710.18	0.0071	0.0041
Mercury	-28422-04-01 05:45 J	-8659622.38	-8659622.26	-8659622.13	0.0072	0.0048
Mercury	-28422-06-28 06:57 J	-8659534.29	-8659534.21	-8659534.09	0.0072	0.0056
Mercury	-28422-09-24 08:52 J	-8659446.20	-8659446.13	-8659446.05	0.0072	0.0063
Mercury	-28422-12-21 10:19 J	-8659358.08	-8659358.07	-8659358.03	0.0072	0.0071
Venus	-28350-03-31 01:11 J	-8633325.67	-8633325.45	-8633325.23	0.0080	0.0014
Venus	-28350-11-11 11:45 J	-8633100.13	-8633100.01	-8633099.85	0.0079	0.0062
Mars	-28349-02-09 14:23 J	-8633010.02	-8633009.90	-8633009.70	0.0079	0.0070
Earth	-28344-01-01 13:11 J	-8631222.20	-8631221.95	-8631221.69	0.0077	0.0012
Moon	-28344-01-01 16:33 J	-8631222.05	-8631221.81	-8631221.55	0.0077	0.0017 *
Mercury	-28341-04-26 12:43 J	-8630010.97	-8630010.97	-8630010.92	0.0075	0.0074
Mercury	-28341-07-23 14:09 J	-8629922.96	-8629922.91	-8629922.82	0.0075	0.0066
Mercury	-28341-10-19 15:35 J	-8629834.93	-8629834.85	-8629834.74	0.0075	0.0058
Mercury	-28340-01-15 17:02 J	-8629746.89	-8629746.79	-8629746.66	0.0074	0.0050
Mercury	-28340-04-13 18:43 J	-8629658.85	-8629658.72	-8629658.60	0.0074	0.0042
Mercury	-28340-07-10 19:40 J	-8629570.80	-8629570.68	-8629570.53	0.0074	0.0035
Mercury	-28340-10-06 21:21 J	-8629482.75	-8629482.61	-8629482.47	0.0074	0.0026
Mercury	-28339-01-02 22:33 J	-8629394.70	-8629394.56	-8629394.41	0.0074	0.0019
Mercury	-28339-03-31 23:45 J	-8629306.65	-8629306.51	-8629306.35	0.0074	0.0012
Mercury	-28339-06-28 01:11 J	-8629218.60	-8629218.45	-8629218.30	0.0074	0.0004
Mercury	-28339-09-24 02:23 J	-8629130.55	-8629130.40	-8629130.25	0.0074	0.0004
Mercury	-28339-12-21 03:35 J	-8629042.50	-8629042.35	-8629042.20	0.0073	0.0011
Mercury	-28338-03-19 04:47 J	-8628954.44	-8628954.30	-8628954.15	0.0073	0.0018
Mercury	-28338-06-15 05:59 J	-8628866.38	-8628866.25	-8628866.10	0.0073	0.0025
Mercury	-28338-09-11 07:26 J	-8628778.33	-8628778.19	-8628778.06	0.0073	0.0032
Mercury	-28338-12-08 08:09 J	-8628690.27	-8628690.16	-8628690.02	0.0073	0.0040
Mercury	-28337-03-05 09:21 J	-8628602.21	-8628602.11	-8628601.98	0.0073	0.0047
Mercury	-28337-06-01 10:33 J	-8628514.15	-8628514.06	-8628513.94	0.0073	0.0054
Mercury	-28337-08-28 11:45 J	-8628426.08	-8628426.01	-8628425.91	0.0073	0.0060
Mercury	-28337-11-24 13:11 J	-8628338.00	-8628337.95	-8628337.89	0.0072	0.0067



Venus	-28192-01-13 10:47 J	-8575692.20	-8575692.05	-8575691.89	0.0064	0.0045
Venus	-28192-08-26 14:23 J	-8575467.11	-8575466.90	-8575466.68	0.0065	0.0007
Venus	-28191-04-08 18:28 J	-8575241.92	-8575241.73	-8575241.54	0.0065	0.0032
Mars	-28190-02-14 08:52 J	-8574930.36	-8574930.13	-8574929.84	0.0065	0.0034
Earth	-28184-06-30 03:35 J	-8572602.56	-8572602.35	-8572602.09	0.0068	0.0029
Moon	-28184-06-30 06:43 J	-8572602.44	-8572602.22	-8572601.98	0.0068	0.0028 *
Moon	-28183-07-01 15:35 J	-8572235.89	-8572235.85	-8572235.75	0.0068	0.0066
Earth	-28183-07-01 19:26 J	-8572235.72	-8572235.69	-8572235.61	0.0068	0.0067
Mercury	-28179-01-06 19:26 J	-8570950.73	-8570950.69	-8570950.63	0.0070	0.0066
Mercury	-28179-04-04 20:38 J	-8570862.70	-8570862.64	-8570862.54	0.0070	0.0060
Mercury	-28179-07-01 22:04 J	-8570774.67	-8570774.58	-8570774.46	0.0070	0.0053
Mercury	-28179-09-27 23:31 J	-8570686.63	-8570686.52	-8570686.38	0.0070	0.0046
Mercury	-28179-12-25 00:57 J	-8570598.58	-8570598.46	-8570598.31	0.0070	0.0039
Mercury	-28178-03-23 02:23 J	-8570510.54	-8570510.40	-8570510.24	0.0070	0.0033
Mercury	-28178-06-19 03:50 J	-8570422.49	-8570422.34	-8570422.18	0.0070	0.0026
Mercury	-28178-09-15 05:16 J	-8570334.43	-8570334.28	-8570334.11	0.0071	0.0019
Mercury	-28178-12-12 06:43 J	-8570246.38	-8570246.22	-8570246.05	0.0071	0.0012
Mercury	-28177-03-09 08:23 J	-8570158.32	-8570158.15	-8570157.99	0.0071	0.0004
Mercury	-28177-06-05 09:50 J	-8570070.26	-8570070.09	-8570069.93	0.0071	0.0003
Mercury	-28177-09-01 11:16 J	-8569982.19	-8569982.03	-8569981.87	0.0071	0.0010
Mercury	-28177-11-28 12:43 J	-8569894.13	-8569893.97	-8569893.81	0.0071	0.0017
Mercury	-28176-02-24 13:55 J	-8569806.06	-8569805.92	-8569805.75	0.0071	0.0026
Mercury	-28176-05-23 15:35 J	-8569717.99	-8569717.85	-8569717.69	0.0071	0.0032
Mercury	-28176-08-19 17:16 J	-8569629.91	-8569629.78	-8569629.64	0.0071	0.0040
Mercury	-28176-11-15 18:28 J	-8569541.84	-8569541.73	-8569541.59	0.0072	0.0048
Mercury	-28175-02-11 20:23 J	-8569453.75	-8569453.65	-8569453.54	0.0072	0.0055
Mercury	-28175-05-10 21:35 J	-8569365.66	-8569365.60	-8569365.50	0.0072	0.0063
Mercury	-28175-08-06 23:02 J	-8569277.54	-8569277.54	-8569277.49	0.0072	0.0071
Venus	-28104-04-27 19:26 J	-8543445.82	-8543445.69	-8543445.53	0.0080	0.0061
Venus	-28104-12-09 06:28 J	-8543220.44	-8543220.23	-8543220.00	0.0080	0.0016

Earth	-28097-01-04 17:45 J	-8541002.93	-8541002.76	-8541002.56	0.0076	0.0054
Moon	-28097-01-04 19:11 J	-8541002.83	-8541002.70	-8541002.50	0.0076	0.0058 *
Mercury	-28095-12-12 02:38 J	-8539930.41	-8539930.39	-8539930.34	0.0075	0.0073
Mercury	-28094-03-10 04:04 J	-8539842.39	-8539842.33	-8539842.24	0.0075	0.0065
Mercury	-28094-06-06 05:31 J	-8539754.36	-8539754.27	-8539754.16	0.0075	0.0057
Mercury	-28094-09-02 06:57 J	-8539666.32	-8539666.21	-8539666.09	0.0074	0.0049
Mercury	-28094-11-29 08:09 J	-8539578.28	-8539578.16	-8539578.02	0.0074	0.0041
Mercury	-28093-02-25 09:35 J	-8539490.23	-8539490.10	-8539489.96	0.0074	0.0033
Mercury	-28093-05-23 10:47 J	-8539402.19	-8539402.05	-8539401.90	0.0074	0.0026
Mercury	-28093-08-19 12:14 J	-8539314.14	-8539313.99	-8539313.84	0.0074	0.0018
Mercury	-28093-11-15 13:26 J	-8539226.09	-8539225.94	-8539225.78	0.0074	0.0011
Mercury	-28092-02-11 14:52 J	-8539138.03	-8539137.88	-8539137.73	0.0074	0.0003
Mercury	-28092-05-10 16:04 J	-8539049.98	-8539049.83	-8539049.68	0.0074	0.0004
Mercury	-28092-08-06 17:16 J	-8538961.93	-8538961.78	-8538961.63	0.0073	0.0012
Mercury	-28092-11-02 18:28 J	-8538873.87	-8538873.73	-8538873.58	0.0073	0.0019
Mercury	-28091-01-29 19:40 J	-8538785.82	-8538785.68	-8538785.54	0.0073	0.0026
Mercury	-28091-04-27 20:52 J	-8538697.76	-8538697.63	-8538697.49	0.0073	0.0033
Mercury	-28091-07-24 21:50 J	-8538609.70	-8538609.59	-8538609.45	0.0073	0.0041
Mercury	-28091-10-20 23:02 J	-8538521.64	-8538521.54	-8538521.41	0.0073	0.0048
Mercury	-28090-01-17 00:14 J	-8538433.58	-8538433.49	-8538433.38	0.0073	0.0055
Mercury	-28090-04-15 01:11 J	-8538345.51	-8538345.45	-8538345.35	0.0073	0.0062
Mercury	-28090-07-12 02:52 J	-8538257.43	-8538257.38	-8538257.33	0.0072	0.0068

## 28TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 28th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-27946-02-11 12:43 J	-8485812.01	-8485811.97	-8485811.89	0.0064	0.0062		
Venus	-27946-09-24 16:33 J	-8485587.00	-8485586.81	-8485586.60	0.0065	0.0024		
Venus	-27945-05-06 20:38 J	-8485361.85	-8485361.64	-8485361.43	0.0065	0.0015		
Venus	-27945-12-17 23:59 J	-8485136.60	-8485136.50	-8485136.36	0.0065	0.0054		
Mars	-27944-07-06 20:09 J	-8484935.88	-8484935.66	-8484935.42	0.0065	0.0043		
Moon	-27938-07-01 15:35 J	-8482749.86	-8482749.85	-8482749.78	0.0068	0.0067		
Earth	-27937-07-02 06:43 J	-8482383.45	-8482383.22	-8482382.97	0.0068	0.0025		
Moon	-27937-07-02 07:11 J	-8482383.43	-8482383.20	-8482382.95	0.0068	0.0023	*	
Mercury	-27933-08-23 09:35 J	-8480870.15	-8480870.10	-8480870.02	0.0070	0.0064		
Mercury	-27933-11-19 11:02 J	-8480782.12	-8480782.04	-8480781.94	0.0070	0.0057		
Mercury	-27932-02-15 12:28 J	-8480694.09	-8480693.98	-8480693.86	0.0070	0.0050		
Mercury	-27932-05-14 13:55 J	-8480606.04	-8480605.92	-8480605.79	0.0070	0.0043		
Mercury	-27932-08-10 15:21 J	-8480518.00	-8480517.86	-8480517.72	0.0070	0.0037		
Mercury	-27932-11-06 16:47 J	-8480429.95	-8480429.80	-8480429.65	0.0070	0.0030		
Mercury	-27931-02-02 17:59 J	-8480341.90	-8480341.75	-8480341.58	0.0071	0.0023		
Mercury	-27931-05-01 19:26 J	-8480253.84	-8480253.69	-8480253.52	0.0071	0.0016		
Mercury	-27931-07-28 21:07 J	-8480165.78	-8480165.62	-8480165.46	0.0071	0.0009		
Mercury	-27931-10-24 22:33 J	-8480077.73	-8480077.56	-8480077.39	0.0071	0.0001		
Mercury	-27930-01-20 23:59 J	-8479989.66	-8479989.50	-8479989.33	0.0071	0.0006		
Mercury	-27930-04-19 01:26 J	-8479901.60	-8479901.44	-8479901.28	0.0071	0.0013		
Mercury	-27930-07-16 02:52 J	-8479813.53	-8479813.38	-8479813.22	0.0071	0.0021		
Mercury	-27930-10-12 04:19 J	-8479725.47	-8479725.32	-8479725.16	0.0071	0.0028		
Mercury	-27929-01-08 05:45 J	-8479637.39	-8479637.26	-8479637.11	0.0071	0.0036		
Mercury	-27929-04-05 07:11 J	-8479549.32	-8479549.20	-8479549.05	0.0072	0.0044		
Mercury	-27929-07-02 08:52 J	-8479461.24	-8479461.13	-8479461.01	0.0072	0.0051		
Mercury	-27929-09-28 10:04 J	-8479373.15	-8479373.08	-8479372.96	0.0072	0.0059		
Mercury	-27929-12-25 11:59 J	-8479285.05	-8479285.00	-8479284.93	0.0072	0.0066		

Venus	-27857-01-07 03:50 J	-8453340.56	-8453340.34	-8453340.12	0.0080	0.0021
Venus	-27857-08-19 14:09 J	-8453115.05	-8453114.91	-8453114.72	0.0080	0.0055
Earth	-27851-01-05 01:40 J	-8451150.68	-8451150.43	-8451150.17	0.0077	0.0005
Moon	-27851-01-05 04:04 J	-8451150.60	-8451150.33	-8451150.07	0.0077	0.0002 *
Mercury	-27848-07-28 17:02 J	-8449849.83	-8449849.79	-8449849.73	0.0075	0.0070
Mercury	-27848-10-24 18:28 J	-8449761.80	-8449761.73	-8449761.64	0.0075	0.0062
Mercury	-27847-01-20 19:55 J	-8449673.77	-8449673.67	-8449673.56	0.0074	0.0054
Mercury	-27847-04-18 21:07 J	-8449585.73	-8449585.62	-8449585.49	0.0074	0.0046
Mercury	-27847-07-15 22:33 J	-8449497.68	-8449497.56	-8449497.42	0.0074	0.0038
Mercury	-27847-10-11 23:59 J	-8449409.64	-8449409.50	-8449409.36	0.0074	0.0030
Mercury	-27846-01-08 01:11 J	-8449321.59	-8449321.45	-8449321.30	0.0074	0.0023
Mercury	-27846-04-06 02:38 J	-8449233.54	-8449233.39	-8449233.24	0.0074	0.0015
Mercury	-27846-07-03 03:50 J	-8449145.49	-8449145.34	-8449145.18	0.0074	0.0008
Mercury	-27846-09-29 05:16 J	-8449057.44	-8449057.28	-8449057.13	0.0074	0.0002
Mercury	-27846-12-26 06:28 J	-8448969.38	-8448969.23	-8448969.08	0.0073	0.0007
Mercury	-27845-03-23 07:40 J	-8448881.33	-8448881.18	-8448881.03	0.0073	0.0015
Mercury	-27845-06-19 08:38 J	-8448793.27	-8448793.14	-8448792.98	0.0073	0.0022
Mercury	-27845-09-15 10:04 J	-8448705.22	-8448705.08	-8448704.94	0.0073	0.0029
Mercury	-27845-12-12 11:16 J	-8448617.16	-8448617.03	-8448616.90	0.0073	0.0036
Mercury	-27844-03-10 12:28 J	-8448529.10	-8448528.98	-8448528.86	0.0073	0.0043
Mercury	-27844-06-06 13:40 J	-8448441.04	-8448440.93	-8448440.82	0.0073	0.0050
Mercury	-27844-09-02 14:52 J	-8448352.97	-8448352.88	-8448352.79	0.0073	0.0057
Mercury	-27844-11-29 15:50 J	-8448264.90	-8448264.84	-8448264.76	0.0072	0.0064
Mercury	-27843-02-25 17:02 J	-8448176.81	-8448176.79	-8448176.76	0.0072	0.0071
Venus	-27700-10-22 19:26 J	-8395706.85	-8395706.69	-8395706.50	0.0064	0.0037
Venus	-27699-06-04 23:31 J	-8395481.74	-8395481.52	-8395481.30	0.0065	0.0002
Venus	-27698-01-16 02:52 J	-8395256.53	-8395256.38	-8395256.19	0.0065	0.0041
Mars	-27698-11-27 11:45 J	-8394941.21	-8394941.01	-8394940.77	0.0065	0.0045
Earth	-27691-07-03 19:40 J	-8392530.92	-8392530.68	-8392530.41	0.0068	0.0010
Moon	-27691-07-03 23:02 J	-8392530.79	-8392530.54	-8392530.27	0.0068	0.0013 *

Mercury	-27686-01-11 23:16 J	-8390877.58	-8390877.53	-8390877.48	0.0070	0.0066
Mercury	-27686-04-10 00:43 J	-8390789.55	-8390789.47	-8390789.39	0.0070	0.0060
Mercury	-27686-07-07 01:40 J	-8390701.52	-8390701.43	-8390701.31	0.0070	0.0053
Mercury	-27686-10-03 03:07 J	-8390613.48	-8390613.37	-8390613.23	0.0070	0.0046
Mercury	-27686-12-30 04:33 J	-8390525.43	-8390525.31	-8390525.16	0.0070	0.0039
Mercury	-27685-03-27 05:59 J	-8390437.39	-8390437.25	-8390437.09	0.0070	0.0032
Mercury	-27685-06-23 07:26 J	-8390349.33	-8390349.19	-8390349.03	0.0071	0.0025
Mercury	-27685-09-19 09:07 J	-8390261.28	-8390261.12	-8390260.96	0.0071	0.0018
Mercury	-27685-12-16 10:33 J	-8390173.22	-8390173.06	-8390172.90	0.0071	0.0011
Mercury	-27684-03-14 11:59 J	-8390085.17	-8390085.00	-8390084.84	0.0071	0.0004
Mercury	-27684-06-10 13:26 J	-8389997.11	-8389996.94	-8389996.77	0.0071	0.0004
Mercury	-27684-09-06 14:52 J	-8389909.04	-8389908.88	-8389908.72	0.0071	0.0011
Mercury	-27684-12-03 16:19 J	-8389820.98	-8389820.82	-8389820.66	0.0071	0.0018
Mercury	-27683-03-01 17:59 J	-8389732.91	-8389732.75	-8389732.60	0.0071	0.0026
Mercury	-27683-05-28 19:11 J	-8389644.84	-8389644.70	-8389644.54	0.0072	0.0034
Mercury	-27683-08-24 20:52 J	-8389556.76	-8389556.63	-8389556.49	0.0072	0.0041
Mercury	-27683-11-20 22:04 J	-8389468.68	-8389468.58	-8389468.44	0.0072	0.0049
Mercury	-27682-02-16 23:31 J	-8389380.60	-8389380.52	-8389380.40	0.0072	0.0057
Mercury	-27682-05-16 01:26 J	-8389292.50	-8389292.44	-8389292.36	0.0072	0.0064
Venus	-27611-02-04 03:50 J	-8363460.53	-8363460.34	-8363460.16	0.0080	0.0046
Venus	-27611-09-17 14:38 J	-8363235.09	-8363234.89	-8363234.67	0.0080	0.0031
Moon	-27605-01-06 10:33 J	-8361298.26	-8361298.06	-8361297.85	0.0077	0.0048
Earth	-27605-01-06 13:40 J	-8361298.11	-8361297.93	-8361297.71	0.0077	0.0049 *
Mercury	-27602-12-17 06:57 J	-8359857.25	-8359857.21	-8359857.15	0.0075	0.0071
Mercury	-27601-03-14 08:23 J	-8359769.22	-8359769.15	-8359769.06	0.0075	0.0063
Mercury	-27601-06-10 09:50 J	-8359681.19	-8359681.09	-8359680.98	0.0074	0.0055
Mercury	-27601-09-06 11:16 J	-8359593.15	-8359593.03	-8359592.91	0.0074	0.0047
Mercury	-27601-12-03 12:14 J	-8359505.11	-8359504.99	-8359504.85	0.0074	0.0039
Mercury	-27600-03-01 13:40 J	-8359417.06	-8359416.93	-8359416.78	0.0074	0.0031
Mercury	-27600-05-28 14:52 J	-8359329.01	-8359328.88	-8359328.72	0.0074	0.0024

Mercury	-27600-08-24 16:33 J	-8359240.96	-8359240.81	-8359240.66	0.0074	0.0016
Mercury	-27600-11-20 17:45 J	-8359152.91	-8359152.76	-8359152.61	0.0074	0.0008
Mercury	-27599-02-16 18:57 J	-8359064.86	-8359064.71	-8359064.55	0.0073	0.0002
Mercury	-27599-05-15 20:23 J	-8358976.81	-8358976.65	-8358976.50	0.0073	0.0007
Mercury	-27599-08-11 21:21 J	-8358888.75	-8358888.61	-8358888.45	0.0073	0.0014
Mercury	-27599-11-07 22:33 J	-8358800.69	-8358800.56	-8358800.41	0.0073	0.0022
Mercury	-27598-02-03 23:59 J	-8358712.64	-8358712.50	-8358712.36	0.0073	0.0028
Mercury	-27598-05-03 01:11 J	-8358624.58	-8358624.45	-8358624.32	0.0073	0.0035
Mercury	-27598-07-30 02:09 J	-8358536.52	-8358536.41	-8358536.28	0.0073	0.0043
Mercury	-27598-10-26 03:21 J	-8358448.46	-8358448.36	-8358448.24	0.0073	0.0050
Mercury	-27597-01-22 04:33 J	-8358360.39	-8358360.31	-8358360.21	0.0073	0.0057
Mercury	-27597-04-19 05:31 J	-8358272.32	-8358272.27	-8358272.18	0.0072	0.0064
Mercury	-27597-07-16 06:43 J	-8358184.24	-8358184.22	-8358184.17	0.0072	0.0070
Venus	-27454-11-21 01:11 J	-8305826.61	-8305826.45	-8305826.27	0.0064	0.0041
Venus	-27453-07-03 05:02 J	-8305601.50	-8305601.29	-8305601.07	0.0065	0.0003
Venus	-27452-02-13 08:38 J	-8305376.31	-8305376.14	-8305375.95	0.0065	0.0036
Jupiter	-27452-02-21 12:57 J	-8305368.28	-8305367.96	-8305367.49	0.0065	0.0046
Mars	-27451-04-19 11:16 J	-8304946.28	-8304946.03	-8304945.73	0.0065	0.0030
Moon	-27445-07-04 11:16 J	-8302678.24	-8302678.03	-8302677.77	0.0068	0.0034
Earth	-27445-07-04 13:40 J	-8302678.14	-8302677.93	-8302677.68	0.0068	0.0031 *
Earth	-27444-07-06 05:16 J	-8302311.32	-8302311.28	-8302311.17	0.0068	0.0065
Mercury	-27440-06-01 13:26 J	-8300884.98	-8300884.94	-8300884.86	0.0070	0.0065
Mercury	-27440-08-28 14:52 J	-8300796.95	-8300796.88	-8300796.77	0.0070	0.0058
Mercury	-27440-11-24 16:19 J	-8300708.92	-8300708.82	-8300708.70	0.0070	0.0051
Mercury	-27439-02-20 17:45 J	-8300620.88	-8300620.76	-8300620.62	0.0070	0.0045
Mercury	-27439-05-19 19:11 J	-8300532.83	-8300532.70	-8300532.55	0.0070	0.0038
Mercury	-27439-08-15 20:38 J	-8300444.78	-8300444.64	-8300444.48	0.0071	0.0031
Mercury	-27439-11-11 22:04 J	-8300356.73	-8300356.58	-8300356.42	0.0071	0.0024
Mercury	-27438-02-07 23:45 J	-8300268.67	-8300268.51	-8300268.35	0.0071	0.0016
Mercury	-27438-05-07 01:11 J	-8300180.62	-8300180.45	-8300180.29	0.0071	0.0009

Mercury	-27438-08-03 02:38 J	-8300092.56	-8300092.39	-8300092.23	0.0071	0.0002
Mercury	-27438-10-30 04:04 J	-8300004.50	-8300004.33	-8300004.17	0.0071	0.0006
Mercury	-27437-01-26 05:16 J	-8299916.43	-8299916.28	-8299916.11	0.0071	0.0014
Mercury	-27437-04-23 06:57 J	-8299828.37	-8299828.21	-8299828.05	0.0071	0.0020
Mercury	-27437-07-20 08:38 J	-8299740.30	-8299740.14	-8299739.99	0.0072	0.0028
Mercury	-27437-10-16 09:50 J	-8299652.22	-8299652.09	-8299651.94	0.0072	0.0036
Mercury	-27436-01-12 11:16 J	-8299564.15	-8299564.03	-8299563.88	0.0072	0.0044
Mercury	-27436-04-10 12:57 J	-8299476.07	-8299475.96	-8299475.84	0.0072	0.0051
Mercury	-27436-07-07 14:23 J	-8299387.98	-8299387.90	-8299387.79	0.0072	0.0059
Mercury	-27436-10-03 15:50 J	-8299299.88	-8299299.84	-8299299.76	0.0072	0.0067
Venus	-27365-03-04 05:59 J	-8273580.39	-8273580.25	-8273580.08	0.0080	0.0058
Venus	-27365-10-15 17:31 J	-8273354.99	-8273354.77	-8273354.55	0.0080	0.0018
Mars	-27364-09-02 20:52 J	-8273032.66	-8273032.63	-8273032.51	0.0079	0.0078
Moon	-27358-01-09 05:02 J	-8271078.43	-8271078.29	-8271078.08	0.0076	0.0058
Earth	-27358-01-09 06:14 J	-8271078.39	-8271078.24	-8271078.04	0.0076	0.0057 *
Mercury	-27355-05-06 21:35 J	-8269864.65	-8269864.60	-8269864.53	0.0075	0.0069
Mercury	-27355-08-02 23:02 J	-8269776.62	-8269776.54	-8269776.45	0.0074	0.0061
Mercury	-27355-10-30 00:28 J	-8269688.58	-8269688.48	-8269688.37	0.0074	0.0053
Mercury	-27354-01-26 01:40 J	-8269600.54	-8269600.43	-8269600.30	0.0074	0.0045
Mercury	-27354-04-24 03:07 J	-8269512.50	-8269512.37	-8269512.23	0.0074	0.0037
Mercury	-27354-07-21 04:33 J	-8269424.45	-8269424.31	-8269424.17	0.0074	0.0029
Mercury	-27354-10-17 05:45 J	-8269336.40	-8269336.26	-8269336.11	0.0074	0.0022
Mercury	-27353-01-13 07:11 J	-8269248.35	-8269248.20	-8269248.05	0.0074	0.0014
Mercury	-27353-04-10 08:23 J	-8269160.30	-8269160.15	-8269160.00	0.0074	0.0007
Mercury	-27353-07-07 09:35 J	-8269072.25	-8269072.10	-8269071.94	0.0073	0.0002
Mercury	-27353-10-03 10:47 J	-8268984.19	-8268984.05	-8268983.89	0.0073	0.0009
Mercury	-27353-12-30 12:14 J	-8268896.14	-8268895.99	-8268895.84	0.0073	0.0016
Mercury	-27352-03-28 13:11 J	-8268808.08	-8268807.95	-8268807.80	0.0073	0.0023
Mercury	-27352-06-24 14:23 J	-8268720.03	-8268719.90	-8268719.75	0.0073	0.0030
Mercury	-27352-09-20 15:50 J	-8268631.97	-8268631.84	-8268631.71	0.0073	0.0037

Mercury	-27352-12-17 17:02 J	-8268543.91	-8268543.79	-8268543.67	0.0073	0.0044
Mercury	-27351-03-15 17:45 J	-8268455.85	-8268455.76	-8268455.63	0.0073	0.0052
Mercury	-27351-06-11 18:57 J	-8268367.78	-8268367.71	-8268367.60	0.0072	0.0059
Mercury	-27351-09-07 20:38 J	-8268279.71	-8268279.64	-8268279.58	0.0072	0.0065
Mercury	-27351-12-04 21:35 J	-8268191.61	-8268191.60	-8268191.58	0.0072	0.0072
Venus	-27208-12-19 07:26 J	-8215946.34	-8215946.19	-8215946.01	0.0064	0.0043
Venus	-27207-08-01 11:16 J	-8215721.24	-8215721.03	-8215720.81	0.0065	0.0005
Venus	-27206-03-14 15:07 J	-8215496.05	-8215495.87	-8215495.68	0.0065	0.0034
Mars	-27205-09-09 11:59 J	-8214951.29	-8214951.00	-8214950.68	0.0065	0.0009
Moon	-27199-07-06 07:26 J	-8212825.34	-8212825.19	-8212825.01	0.0068	0.0050
Earth	-27199-07-06 09:21 J	-8212825.28	-8212825.11	-8212824.91	0.0068	0.0047 *
Earth	-27198-07-08 01:11 J	-8212458.62	-8212458.45	-8212458.26	0.0068	0.0048
Moon	-27198-07-08 01:11 J	-8212458.60	-8212458.45	-8212458.24	0.0068	0.0052 *
Mercury	-27194-07-25 03:21 J	-8210980.39	-8210980.36	-8210980.32	0.0070	0.0068
Mercury	-27194-10-21 04:47 J	-8210892.37	-8210892.30	-8210892.22	0.0070	0.0062
Mercury	-27193-01-17 05:45 J	-8210804.34	-8210804.26	-8210804.14	0.0070	0.0055
Mercury	-27193-04-14 07:11 J	-8210716.30	-8210716.20	-8210716.07	0.0070	0.0048
Mercury	-27193-07-11 08:38 J	-8210628.26	-8210628.14	-8210627.99	0.0070	0.0041
Mercury	-27193-10-07 10:04 J	-8210540.21	-8210540.08	-8210539.93	0.0071	0.0034
Mercury	-27192-01-03 11:45 J	-8210452.16	-8210452.01	-8210451.86	0.0071	0.0027
Mercury	-27192-04-01 13:11 J	-8210364.11	-8210363.95	-8210363.79	0.0071	0.0020
Mercury	-27192-06-28 14:23 J	-8210276.05	-8210275.90	-8210275.73	0.0071	0.0013
Mercury	-27192-09-24 16:04 J	-8210187.99	-8210187.83	-8210187.66	0.0071	0.0006
Mercury	-27192-12-21 17:31 J	-8210099.93	-8210099.77	-8210099.60	0.0071	0.0002
Mercury	-27191-03-19 18:57 J	-8210011.87	-8210011.71	-8210011.54	0.0071	0.0009
Mercury	-27191-06-15 20:23 J	-8209923.81	-8209923.65	-8209923.48	0.0071	0.0017
Mercury	-27191-09-11 21:50 J	-8209835.74	-8209835.59	-8209835.43	0.0071	0.0024
Mercury	-27191-12-08 23:31 J	-8209747.67	-8209747.52	-8209747.37	0.0072	0.0032
Mercury	-27190-03-07 00:43 J	-8209659.59	-8209659.47	-8209659.32	0.0072	0.0040
Mercury	-27190-06-03 02:23 J	-8209571.51	-8209571.40	-8209571.26	0.0072	0.0047



Mercury	-27190-08-30 03:50 J	-8209483.43	-8209483.34	-8209483.22	0.0072	0.0055
Mercury	-27190-11-26 05:16 J	-8209395.34	-8209395.28	-8209395.18	0.0072	0.0063
Mercury	-27189-02-22 06:57 J	-8209307.22	-8209307.21	-8209307.16	0.0072	0.0071
Venus	-27119-04-02 11:31 J	-8183700.16	-8183700.02	-8183699.87	0.0080	0.0060
Venus	-27119-11-13 22:33 J	-8183474.77	-8183474.56	-8183474.33	0.0080	0.0016
Mars	-27117-01-25 02:23 J	-8183037.69	-8183037.40	-8183037.08	0.0079	0.0025
Moon	-27112-01-09 23:31 J	-8181225.72	-8181225.52	-8181225.29	0.0076	0.0040
Earth	-27112-01-10 02:52 J	-8181225.61	-8181225.38	-8181225.15	0.0076	0.0037 *
Mercury	-27109-06-28 11:59 J	-8179960.03	-8179960.00	-8179959.96	0.0075	0.0072
Mercury	-27109-09-24 13:11 J	-8179872.02	-8179871.95	-8179871.86	0.0074	0.0064
Mercury	-27109-12-21 14:23 J	-8179783.98	-8179783.90	-8179783.79	0.0074	0.0056
Mercury	-27108-03-19 15:50 J	-8179695.94	-8179695.84	-8179695.71	0.0074	0.0048
Mercury	-27108-06-15 17:16 J	-8179607.90	-8179607.78	-8179607.65	0.0074	0.0040
Mercury	-27108-09-11 18:43 J	-8179519.86	-8179519.72	-8179519.58	0.0074	0.0032
Mercury	-27108-12-08 19:55 J	-8179431.81	-8179431.67	-8179431.52	0.0074	0.0025
Mercury	-27107-03-06 21:21 J	-8179343.76	-8179343.61	-8179343.46	0.0074	0.0017
Mercury	-27107-06-02 22:33 J	-8179255.71	-8179255.56	-8179255.41	0.0074	0.0009
Mercury	-27107-08-29 23:45 J	-8179167.66	-8179167.51	-8179167.35	0.0073	0.0003
Mercury	-27107-11-26 00:57 J	-8179079.60	-8179079.46	-8179079.30	0.0073	0.0006
Mercury	-27106-02-22 02:09 J	-8178991.55	-8178991.41	-8178991.25	0.0073	0.0014
Mercury	-27106-05-21 03:35 J	-8178903.50	-8178903.35	-8178903.20	0.0073	0.0020
Mercury	-27106-08-17 04:33 J	-8178815.44	-8178815.31	-8178815.16	0.0073	0.0028
Mercury	-27106-11-13 05:45 J	-8178727.38	-8178727.26	-8178727.12	0.0073	0.0035
Mercury	-27105-02-09 06:57 J	-8178639.32	-8178639.21	-8178639.08	0.0073	0.0042
Mercury	-27105-05-07 08:23 J	-8178551.26	-8178551.15	-8178551.04	0.0073	0.0049
Mercury	-27105-08-03 09:35 J	-8178463.19	-8178463.10	-8178463.01	0.0072	0.0056
Mercury	-27105-10-30 10:33 J	-8178375.12	-8178375.06	-8178374.98	0.0072	0.0063
Mercury	-27104-01-26 11:45 J	-8178287.04	-8178287.01	-8178286.97	0.0072	0.0070

# 27TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 27th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-26961-01-17 16:19 J		-8126065.98	-8126065.82	-8126065.62	0.0064	0.0035	
Venus	-26961-08-29 20:23 J		-8125840.86	-8125840.65	-8125840.43	0.0065	0.0003	
Venus	-26960-04-11 23:59 J		-8125615.65	-8125615.50	-8125615.32	0.0065	0.0042	
Mars	-26958-01-31 21:35 J		-8124955.85	-8124955.60	-8124955.31	0.0066	0.0032	
Earth	-26953-07-07 09:35 J		-8122972.24	-8122972.10	-8122971.89	0.0068	0.0050	
Moon	-26953-07-07 12:57 J		-8122972.10	-8122971.96	-8122971.77	0.0068	0.0052	*
Moon	-26952-07-08 22:04 J		-8122605.74	-8122605.58	-8122605.38	0.0068	0.0049	
Earth	-26952-07-09 01:40 J		-8122605.60	-8122605.43	-8122605.22	0.0068	0.0047	*
Mercury	-26948-09-15 17:59 J		-8121075.76	-8121075.75	-8121075.69	0.0070	0.0069	
Mercury	-26948-12-12 19:26 J		-8120987.75	-8120987.69	-8120987.60	0.0070	0.0062	
Mercury	-26947-03-10 20:52 J		-8120899.72	-8120899.63	-8120899.51	0.0070	0.0055	
Mercury	-26947-06-06 22:19 J		-8120811.68	-8120811.57	-8120811.44	0.0070	0.0048	
Mercury	-26947-09-02 23:45 J		-8120723.63	-8120723.51	-8120723.37	0.0071	0.0041	
Mercury	-26947-11-30 01:11 J		-8120635.59	-8120635.45	-8120635.30	0.0071	0.0034	
Mercury	-26946-02-26 02:38 J		-8120547.54	-8120547.39	-8120547.23	0.0071	0.0027	
Mercury	-26946-05-25 04:04 J		-8120459.48	-8120459.33	-8120459.17	0.0071	0.0019	
Mercury	-26946-08-21 05:31 J		-8120371.43	-8120371.27	-8120371.10	0.0071	0.0012	
Mercury	-26946-11-17 06:57 J		-8120283.37	-8120283.21	-8120283.04	0.0071	0.0005	
Mercury	-26945-02-13 08:38 J		-8120195.31	-8120195.14	-8120194.98	0.0071	0.0003	

Mercury	-26945-05-11 09:50 J	-8120107.25	-8120107.09	-8120106.92	0.0071	0.0011
Mercury	-26945-08-07 11:31 J	-8120019.18	-8120019.02	-8120018.86	0.0071	0.0018
Mercury	-26945-11-03 12:43 J	-8119931.11	-8119930.97	-8119930.80	0.0072	0.0026
Mercury	-26944-01-30 14:23 J	-8119843.04	-8119842.90	-8119842.75	0.0072	0.0033
Mercury	-26944-04-28 15:50 J	-8119754.97	-8119754.84	-8119754.69	0.0072	0.0041
Mercury	-26944-07-25 17:31 J	-8119666.89	-8119666.77	-8119666.64	0.0072	0.0048
Mercury	-26944-10-21 18:57 J	-8119578.80	-8119578.71	-8119578.60	0.0072	0.0056
Mercury	-26943-01-17 20:23 J	-8119490.71	-8119490.65	-8119490.56	0.0072	0.0064
Mercury	-26943-04-15 22:04 J	-8119402.58	-8119402.58	-8119402.56	0.0072	0.0072
Venus	-26873-04-30 20:38 J	-8093819.81	-8093819.64	-8093819.46	0.0080	0.0049
Venus	-26873-12-12 07:26 J	-8093594.39	-8093594.19	-8093593.96	0.0080	0.0028
Mars	-26871-06-17 17:59 J	-8093041.97	-8093041.75	-8093041.48	0.0079	0.0052
Earth	-26866-01-12 02:38 J	-8091372.60	-8091372.39	-8091372.13	0.0076	0.0034
Moon	-26866-01-12 05:16 J	-8091372.49	-8091372.28	-8091372.04	0.0076	0.0037 *
Mercury	-26863-08-21 02:38 J	-8090055.41	-8090055.39	-8090055.33	0.0074	0.0072
Mercury	-26863-11-17 04:04 J	-8089967.39	-8089967.33	-8089967.24	0.0074	0.0064
Mercury	-26862-02-13 05:31 J	-8089879.36	-8089879.27	-8089879.16	0.0074	0.0056
Mercury	-26862-05-12 06:57 J	-8089791.32	-8089791.21	-8089791.09	0.0074	0.0048
Mercury	-26862-08-08 08:09 J	-8089703.28	-8089703.16	-8089703.02	0.0074	0.0040
Mercury	-26862-11-04 09:35 J	-8089615.23	-8089615.10	-8089614.95	0.0074	0.0032
Mercury	-26861-01-31 11:02 J	-8089527.18	-8089527.04	-8089526.89	0.0074	0.0024
Mercury	-26861-04-28 12:14 J	-8089439.13	-8089438.99	-8089438.83	0.0074	0.0017
Mercury	-26861-07-25 13:40 J	-8089351.08	-8089350.93	-8089350.78	0.0073	0.0009
Mercury	-26861-10-21 14:52 J	-8089263.03	-8089262.88	-8089262.72	0.0073	0.0002
Mercury	-26860-01-17 16:04 J	-8089174.98	-8089174.83	-8089174.67	0.0073	0.0007
Mercury	-26860-04-15 17:16 J	-8089086.92	-8089086.78	-8089086.62	0.0073	0.0014
Mercury	-26860-07-12 18:28 J	-8088998.87	-8088998.73	-8088998.58	0.0073	0.0021
Mercury	-26860-10-08 19:55 J	-8088910.81	-8088910.67	-8088910.53	0.0073	0.0028
Mercury	-26859-01-04 20:52 J	-8088822.75	-8088822.63	-8088822.49	0.0073	0.0036
Mercury	-26859-04-02 22:04 J	-8088734.69	-8088734.58	-8088734.45	0.0073	0.0043

Mercury	-26859-06-29 23:16 J	-8088646.63	-8088646.53	-8088646.41	0.0073	0.0050
Mercury	-26859-09-26 00:14 J	-8088558.57	-8088558.49	-8088558.38	0.0072	0.0057
Mercury	-26859-12-23 01:26 J	-8088470.50	-8088470.44	-8088470.35	0.0072	0.0064
Mercury	-26858-03-21 02:38 J	-8088382.41	-8088382.39	-8088382.35	0.0072	0.0070
Venus	-26715-02-15 01:55 J	-8036185.61	-8036185.42	-8036185.21	0.0064	0.0027
Venus	-26715-09-28 05:45 J	-8035960.47	-8035960.26	-8035960.04	0.0065	0.0012
Venus	-26714-05-11 09:21 J	-8035735.22	-8035735.11	-8035734.95	0.0065	0.0050
Earth	-26707-07-09 11:02 J	-8033119.20	-8033119.04	-8033118.85	0.0068	0.0050
Moon	-26707-07-09 11:16 J	-8033119.18	-8033119.03	-8033118.83	0.0068	0.0051 *
Earth	-26706-07-11 02:23 J	-8032752.56	-8032752.40	-8032752.18	0.0068	0.0046
Moon	-26706-07-11 03:07 J	-8032752.52	-8032752.37	-8032752.16	0.0068	0.0048 *
Mercury	-26702-11-08 09:21 J	-8031171.14	-8031171.11	-8031171.06	0.0070	0.0067
Mercury	-26701-02-04 10:33 J	-8031083.12	-8031083.06	-8031082.96	0.0070	0.0061
Mercury	-26701-05-02 11:59 J	-8030995.09	-8030995.00	-8030994.88	0.0070	0.0054
Mercury	-26701-07-29 13:26 J	-8030907.05	-8030906.94	-8030906.81	0.0071	0.0047
Mercury	-26701-10-25 14:52 J	-8030819.01	-8030818.88	-8030818.74	0.0071	0.0040
Mercury	-26700-01-21 16:04 J	-8030730.96	-8030730.83	-8030730.67	0.0071	0.0033
Mercury	-26700-04-19 17:59 J	-8030642.91	-8030642.75	-8030642.60	0.0071	0.0025
Mercury	-26700-07-16 19:11 J	-8030554.85	-8030554.70	-8030554.54	0.0071	0.0018
Mercury	-26700-10-12 20:38 J	-8030466.80	-8030466.64	-8030466.47	0.0071	0.0011
Mercury	-26699-01-08 22:04 J	-8030378.74	-8030378.58	-8030378.41	0.0071	0.0004
Mercury	-26699-04-06 23:31 J	-8030290.68	-8030290.52	-8030290.35	0.0071	0.0005
Mercury	-26699-07-04 01:11 J	-8030202.61	-8030202.45	-8030202.29	0.0071	0.0012
Mercury	-26699-09-30 02:23 J	-8030114.55	-8030114.40	-8030114.23	0.0072	0.0020
Mercury	-26699-12-27 04:04 J	-8030026.48	-8030026.33	-8030026.17	0.0072	0.0027
Mercury	-26698-03-25 05:16 J	-8029938.41	-8029938.28	-8029938.12	0.0072	0.0035
Mercury	-26698-06-21 07:11 J	-8029850.33	-8029850.20	-8029850.07	0.0072	0.0042
Mercury	-26698-09-17 08:23 J	-8029762.25	-8029762.15	-8029762.02	0.0072	0.0050
Mercury	-26698-12-14 09:50 J	-8029674.17	-8029674.09	-8029673.97	0.0072	0.0059
Mercury	-26697-03-11 11:16 J	-8029586.07	-8029586.03	-8029585.94	0.0072	0.0067

Venus	-26627-05-30 06:28 J	-8003939.43	-8003939.23	-8003939.01	0.0080	0.0031
Venus	-26626-01-10 17:16 J	-8003713.95	-8003713.78	-8003713.58	0.0080	0.0045
Earth	-26620-01-13 05:31 J	-8001519.48	-8001519.27	-8001519.03	0.0076	0.0037
Moon	-26620-01-13 07:40 J	-8001519.39	-8001519.18	-8001518.94	0.0076	0.0041 *
Mercury	-26617-10-12 17:59 J	-8000150.78	-8000150.75	-8000150.67	0.0074	0.0070
Mercury	-26616-01-08 19:26 J	-8000062.76	-8000062.69	-8000062.59	0.0074	0.0062
Mercury	-26616-04-06 20:52 J	-7999974.72	-7999974.63	-7999974.51	0.0074	0.0053
Mercury	-26616-07-03 22:19 J	-7999886.68	-7999886.57	-7999886.44	0.0074	0.0045
Mercury	-26616-09-29 23:45 J	-7999798.64	-7999798.51	-7999798.37	0.0074	0.0037
Mercury	-26616-12-27 00:57 J	-7999710.59	-7999710.46	-7999710.31	0.0074	0.0030
Mercury	-26615-03-25 02:23 J	-7999622.54	-7999622.40	-7999622.25	0.0074	0.0022
Mercury	-26615-06-21 03:35 J	-7999534.49	-7999534.35	-7999534.19	0.0074	0.0015
Mercury	-26615-09-17 05:02 J	-7999446.44	-7999446.29	-7999446.14	0.0073	0.0007
Mercury	-26615-12-14 06:28 J	-7999358.39	-7999358.23	-7999358.08	0.0073	0.0002
Mercury	-26614-03-12 07:40 J	-7999270.33	-7999270.18	-7999270.03	0.0073	0.0008
Mercury	-26614-06-08 08:38 J	-7999182.28	-7999182.14	-7999181.98	0.0073	0.0016
Mercury	-26614-09-04 10:04 J	-7999094.22	-7999094.08	-7999093.94	0.0073	0.0023
Mercury	-26614-12-01 11:02 J	-7999006.16	-7999006.04	-7999005.89	0.0073	0.0031
Mercury	-26613-02-27 12:14 J	-7998918.11	-7998917.99	-7998917.85	0.0073	0.0038
Mercury	-26613-05-25 13:26 J	-7998830.04	-7998829.94	-7998829.81	0.0073	0.0045
Mercury	-26613-08-21 14:38 J	-7998741.98	-7998741.89	-7998741.77	0.0072	0.0052
Mercury	-26613-11-17 15:50 J	-7998653.91	-7998653.84	-7998653.74	0.0072	0.0059
Mercury	-26612-02-13 17:02 J	-7998565.84	-7998565.79	-7998565.72	0.0072	0.0066
Venus	-26470-08-03 09:07 J	-7946530.23	-7946530.12	-7946529.95	0.0064	0.0050
Venus	-26469-03-15 13:26 J	-7946305.15	-7946304.94	-7946304.72	0.0065	0.0011
Venus	-26469-10-26 17:02 J	-7946079.98	-7946079.79	-7946079.58	0.0065	0.0027
Moon	-26461-07-10 12:14 J	-7943266.18	-7943265.99	-7943265.75	0.0068	0.0039
Earth	-26461-07-10 16:04 J	-7943266.03	-7943265.83	-7943265.61	0.0068	0.0039 *
Earth	-26460-07-12 07:40 J	-7942899.30	-7942899.18	-7942899.02	0.0068	0.0058
Moon	-26460-07-12 11:02 J	-7942899.16	-7942899.04	-7942898.88	0.0068	0.0058 *

Mercury	-26456-10-04 00:14 J	-7941354.50	-7941354.49	-7941354.47	0.0070	0.0070
Mercury	-26456-12-31 01:11 J	-7941266.50	-7941266.45	-7941266.36	0.0070	0.0063
Mercury	-26455-03-29 02:38 J	-7941178.47	-7941178.39	-7941178.28	0.0070	0.0056
Mercury	-26455-06-25 04:19 J	-7941090.43	-7941090.32	-7941090.20	0.0071	0.0049
Mercury	-26455-09-21 05:45 J	-7941002.39	-7941002.26	-7941002.13	0.0071	0.0042
Mercury	-26455-12-18 06:57 J	-7940914.34	-7940914.21	-7940914.06	0.0071	0.0035
Mercury	-26454-03-16 08:23 J	-7940826.29	-7940826.15	-7940825.99	0.0071	0.0028
Mercury	-26454-06-12 09:50 J	-7940738.24	-7940738.09	-7940737.92	0.0071	0.0021
Mercury	-26454-09-08 11:31 J	-7940650.18	-7940650.02	-7940649.86	0.0071	0.0013
Mercury	-26454-12-05 12:57 J	-7940562.12	-7940561.96	-7940561.80	0.0071	0.0006
Mercury	-26453-03-02 14:23 J	-7940474.06	-7940473.90	-7940473.73	0.0071	0.0002
Mercury	-26453-05-29 15:50 J	-7940386.00	-7940385.84	-7940385.67	0.0071	0.0009
Mercury	-26453-08-25 17:16 J	-7940297.94	-7940297.78	-7940297.61	0.0072	0.0017
Mercury	-26453-11-21 18:43 J	-7940209.87	-7940209.72	-7940209.56	0.0072	0.0024
Mercury	-26452-02-17 20:23 J	-7940121.80	-7940121.65	-7940121.50	0.0072	0.0032
Mercury	-26452-05-16 21:35 J	-7940033.72	-7940033.60	-7940033.45	0.0072	0.0040
Mercury	-26452-08-12 23:02 J	-7939945.64	-7939945.54	-7939945.40	0.0072	0.0048
Mercury	-26452-11-09 00:57 J	-7939857.56	-7939857.46	-7939857.35	0.0072	0.0056
Mercury	-26451-02-05 02:23 J	-7939769.47	-7939769.40	-7939769.31	0.0072	0.0064
Mercury	-26451-05-04 04:04 J	-7939681.34	-7939681.33	-7939681.30	0.0072	0.0072
Venus	-26382-11-15 08:23 J	-7914284.20	-7914284.15	-7914284.10	0.0080	0.0078
Venus	-26381-06-27 19:26 J	-7914058.91	-7914058.69	-7914058.46	0.0080	0.0002
Venus	-26380-02-08 05:45 J	-7913833.32	-7913833.26	-7913833.15	0.0080	0.0074
Moon	-26374-01-15 09:35 J	-7911666.27	-7911666.10	-7911665.92	0.0076	0.0057
Earth	-26374-01-15 12:57 J	-7911666.15	-7911665.96	-7911665.78	0.0076	0.0053 *
Mercury	-26371-09-08 09:21 J	-7910334.14	-7910334.11	-7910334.07	0.0074	0.0072
Mercury	-26371-12-05 10:33 J	-7910246.13	-7910246.06	-7910245.97	0.0074	0.0064
Mercury	-26370-03-03 11:59 J	-7910158.09	-7910158.00	-7910157.89	0.0074	0.0056
Mercury	-26370-05-30 13:26 J	-7910070.05	-7910069.94	-7910069.82	0.0074	0.0047
Mercury	-26370-08-26 14:38 J	-7909982.01	-7909981.89	-7909981.75	0.0074	0.0040

Mercury	-26370-11-22 16:04 J	-7909893.96	-7909893.83	-7909893.69	0.0074	0.0032
Mercury	-26369-02-18 17:31 J	-7909805.92	-7909805.77	-7909805.63	0.0074	0.0024
Mercury	-26369-05-16 18:43 J	-7909717.87	-7909717.72	-7909717.57	0.0073	0.0016
Mercury	-26369-08-12 19:55 J	-7909629.82	-7909629.67	-7909629.51	0.0073	0.0009
Mercury	-26369-11-08 21:21 J	-7909541.76	-7909541.61	-7909541.46	0.0073	0.0001
Mercury	-26368-02-04 22:33 J	-7909453.71	-7909453.56	-7909453.41	0.0073	0.0006
Mercury	-26368-05-03 23:45 J	-7909365.66	-7909365.51	-7909365.36	0.0073	0.0014
Mercury	-26368-07-31 00:57 J	-7909277.60	-7909277.46	-7909277.31	0.0073	0.0021
Mercury	-26368-10-27 02:09 J	-7909189.54	-7909189.41	-7909189.26	0.0073	0.0028
Mercury	-26367-01-23 03:07 J	-7909101.49	-7909101.37	-7909101.22	0.0073	0.0036
Mercury	-26367-04-21 04:33 J	-7909013.43	-7909013.31	-7909013.18	0.0073	0.0042
Mercury	-26367-07-18 05:45 J	-7908925.36	-7908925.26	-7908925.14	0.0072	0.0050
Mercury	-26367-10-14 06:57 J	-7908837.30	-7908837.21	-7908837.11	0.0072	0.0056
Mercury	-26366-01-10 07:55 J	-7908749.23	-7908749.17	-7908749.09	0.0072	0.0064
Mercury	-26366-04-08 09:07 J	-7908661.14	-7908661.12	-7908661.08	0.0072	0.0070
Venus	-26224-08-31 19:55 J	-7856649.83	-7856649.67	-7856649.48	0.0064	0.0037
Venus	-26223-04-13 23:59 J	-7856424.71	-7856424.50	-7856424.28	0.0065	0.0002
Venus	-26223-11-25 03:21 J	-7856199.51	-7856199.36	-7856199.17	0.0065	0.0040
Mars	-26221-05-17 04:47 J	-7855660.48	-7855660.30	-7855660.11	0.0065	0.0052
Earth	-26215-07-12 19:26 J	-7853412.90	-7853412.69	-7853412.44	0.0068	0.0033
Moon	-26215-07-12 19:55 J	-7853412.86	-7853412.67	-7853412.42	0.0068	0.0032 *
Moon	-26214-07-14 08:52 J	-7853046.19	-7853046.13	-7853045.99	0.0068	0.0064
Earth	-26214-07-14 11:31 J	-7853046.08	-7853046.02	-7853045.92	0.0068	0.0065 *
Mercury	-26210-11-26 15:50 J	-7851449.88	-7851449.84	-7851449.78	0.0070	0.0067
Mercury	-26209-02-22 17:16 J	-7851361.86	-7851361.78	-7851361.69	0.0070	0.0060
Mercury	-26209-05-20 18:28 J	-7851273.83	-7851273.73	-7851273.61	0.0071	0.0053
Mercury	-26209-08-16 19:55 J	-7851185.79	-7851185.67	-7851185.54	0.0071	0.0046
Mercury	-26209-11-12 21:07 J	-7851097.74	-7851097.62	-7851097.47	0.0071	0.0039
Mercury	-26208-02-08 22:33 J	-7851009.69	-7851009.56	-7851009.40	0.0071	0.0032
Mercury	-26208-05-08 00:14 J	-7850921.64	-7850921.49	-7850921.33	0.0071	0.0024

Mercury	-26208-08-04 01:40 J	-7850833.59	-7850833.43	-7850833.27	0.0071	0.0017
Mercury	-26208-10-31 03:07 J	-7850745.53	-7850745.37	-7850745.20	0.0071	0.0010
Mercury	-26207-01-27 04:33 J	-7850657.47	-7850657.31	-7850657.14	0.0071	0.0003
Mercury	-26207-04-25 05:59 J	-7850569.41	-7850569.25	-7850569.08	0.0071	0.0006
Mercury	-26207-07-22 07:40 J	-7850481.34	-7850481.18	-7850481.02	0.0072	0.0013
Mercury	-26207-10-18 08:52 J	-7850393.28	-7850393.13	-7850392.96	0.0072	0.0021
Mercury	-26206-01-14 10:33 J	-7850305.21	-7850305.06	-7850304.91	0.0072	0.0028
Mercury	-26206-04-12 11:59 J	-7850217.14	-7850217.00	-7850216.85	0.0072	0.0036
Mercury	-26206-07-09 13:26 J	-7850129.06	-7850128.94	-7850128.80	0.0072	0.0044
Mercury	-26206-10-05 14:52 J	-7850040.98	-7850040.88	-7850040.75	0.0072	0.0052
Mercury	-26205-01-01 16:47 J	-7849952.89	-7849952.80	-7849952.71	0.0072	0.0060
Mercury	-26205-03-29 18:14 J	-7849864.79	-7849864.74	-7849864.68	0.0072	0.0068
Venus	-26136-12-13 20:38 J	-7824403.81	-7824403.64	-7824403.46	0.0080	0.0052
Venus	-26135-07-27 07:40 J	-7824178.39	-7824178.18	-7824177.96	0.0080	0.0024
Earth	-26129-01-15 16:33 J	-7822179.86	-7822179.81	-7822179.68	0.0077	0.0072
Moon	-26129-01-15 20:38 J	-7822179.69	-7822179.64	-7822179.60	0.0077	0.0075 *
Moon	-26128-01-16 16:33 J	-7821812.89	-7821812.81	-7821812.71	0.0076	0.0071
Earth	-26128-01-16 18:14 J	-7821812.86	-7821812.74	-7821812.61	0.0076	0.0067 *
Mercury	-26125-10-31 01:26 J	-7820429.50	-7820429.44	-7820429.37	0.0074	0.0067
Mercury	-26124-01-27 02:52 J	-7820341.47	-7820341.38	-7820341.28	0.0074	0.0058
Mercury	-26124-04-25 04:19 J	-7820253.43	-7820253.32	-7820253.21	0.0074	0.0050
Mercury	-26124-07-22 05:16 J	-7820165.39	-7820165.28	-7820165.14	0.0074	0.0043
Mercury	-26124-10-18 06:43 J	-7820077.34	-7820077.22	-7820077.07	0.0074	0.0035
Mercury	-26123-01-14 08:09 J	-7819989.30	-7819989.16	-7819989.01	0.0074	0.0027
Mercury	-26123-04-12 09:21 J	-7819901.25	-7819901.11	-7819900.95	0.0074	0.0019
Mercury	-26123-07-09 10:47 J	-7819813.20	-7819813.05	-7819812.90	0.0073	0.0011
Mercury	-26123-10-05 11:59 J	-7819725.15	-7819725.00	-7819724.84	0.0073	0.0004
Mercury	-26122-01-01 13:26 J	-7819637.10	-7819636.94	-7819636.79	0.0073	0.0004
Mercury	-26122-03-30 14:38 J	-7819549.04	-7819548.89	-7819548.74	0.0073	0.0011
Mercury	-26122-06-26 15:35 J	-7819460.99	-7819460.85	-7819460.69	0.0073	0.0019



Mercury	-26122-09-22 17:02 J	-7819372.93	-7819372.79	-7819372.65	0.0073	0.0026
Mercury	-26122-12-19 18:14 J	-7819284.87	-7819284.74	-7819284.60	0.0073	0.0033
Mercury	-26121-03-16 19:11 J	-7819196.81	-7819196.70	-7819196.56	0.0073	0.0041
Mercury	-26121-06-12 20:23 J	-7819108.75	-7819108.65	-7819108.53	0.0072	0.0048
Mercury	-26121-09-08 21:35 J	-7819020.69	-7819020.60	-7819020.49	0.0072	0.0054
Mercury	-26121-12-05 22:47 J	-7818932.62	-7818932.55	-7818932.46	0.0072	0.0061
Mercury	-26120-03-03 23:59 J	-7818844.54	-7818844.50	-7818844.45	0.0072	0.0068

# 26TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 26th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-25978-02-17 04:04 J	-7766994.40	-7766994.33	-7766994.21	0.0064	0.0057		
Venus	-25978-09-30 08:09 J	-7766769.36	-7766769.16	-7766768.95	0.0064	0.0020		
Venus	-25977-05-12 11:45 J	-7766544.20	-7766544.01	-7766543.78	0.0065	0.0019		
Venus	-25977-12-23 15:21 J	-7766318.94	-7766318.86	-7766318.73	0.0065	0.0057		
Mars	-25975-10-08 21:35 J	-7765664.90	-7765664.60	-7765664.28	0.0066	0.0009		
Earth	-25969-07-14 01:11 J	-7763559.68	-7763559.45	-7763559.18	0.0068	0.0019		
Moon	-25969-07-14 04:47 J	-7763559.54	-7763559.30	-7763559.03	0.0068	0.0017	*	
Mercury	-25964-10-22 06:28 J	-7761633.25	-7761633.23	-7761633.17	0.0070	0.0069		
Mercury	-25963-01-18 07:55 J	-7761545.23	-7761545.17	-7761545.08	0.0070	0.0062		
Mercury	-25963-04-16 09:21 J	-7761457.20	-7761457.11	-7761456.99	0.0071	0.0055		
Mercury	-25963-07-13 10:33 J	-7761369.16	-7761369.06	-7761368.92	0.0071	0.0048		

Mercury	-25963-10-09 12:14 J	-7761281.12	-7761280.99	-7761280.85	0.0071	0.0040
Mercury	-25962-01-05 13:40 J	-7761193.07	-7761192.93	-7761192.78	0.0071	0.0033
Mercury	-25962-04-03 14:52 J	-7761105.02	-7761104.88	-7761104.71	0.0071	0.0026
Mercury	-25962-06-30 16:33 J	-7761016.96	-7761016.81	-7761016.65	0.0071	0.0018
Mercury	-25962-09-26 17:59 J	-7760928.91	-7760928.75	-7760928.58	0.0071	0.0011
Mercury	-25962-12-23 19:26 J	-7760840.85	-7760840.69	-7760840.52	0.0071	0.0004
Mercury	-25961-03-20 20:52 J	-7760752.79	-7760752.63	-7760752.46	0.0072	0.0005
Mercury	-25961-06-16 22:19 J	-7760664.73	-7760664.57	-7760664.40	0.0072	0.0012
Mercury	-25961-09-12 23:45 J	-7760576.66	-7760576.51	-7760576.34	0.0072	0.0020
Mercury	-25961-12-10 01:26 J	-7760488.59	-7760488.44	-7760488.29	0.0072	0.0027
Mercury	-25960-03-08 02:38 J	-7760400.52	-7760400.39	-7760400.23	0.0072	0.0035
Mercury	-25960-06-04 04:04 J	-7760312.44	-7760312.33	-7760312.18	0.0072	0.0043
Mercury	-25960-08-31 05:59 J	-7760224.36	-7760224.25	-7760224.13	0.0072	0.0051
Mercury	-25960-11-27 07:26 J	-7760136.28	-7760136.19	-7760136.09	0.0072	0.0059
Mercury	-25959-02-23 08:52 J	-7760048.18	-7760048.13	-7760048.05	0.0072	0.0067
Venus	-25889-01-12 10:04 J	-7734523.29	-7734523.08	-7734522.85	0.0080	0.0020
Venus	-25889-08-24 20:52 J	-7734297.77	-7734297.63	-7734297.45	0.0080	0.0056
Mars	-25887-02-22 00:28 J	-7733751.74	-7733751.48	-7733751.17	0.0079	0.0037
Moon	-25883-01-16 21:50 J	-7732326.75	-7732326.59	-7732326.38	0.0077	0.0055
Earth	-25883-01-17 00:28 J	-7732326.66	-7732326.48	-7732326.27	0.0077	0.0051 *
Mercury	-25879-09-26 16:19 J	-7730612.86	-7730612.82	-7730612.75	0.0074	0.0069
Mercury	-25879-12-23 17:45 J	-7730524.83	-7730524.76	-7730524.66	0.0074	0.0060
Mercury	-25878-03-21 19:11 J	-7730436.80	-7730436.70	-7730436.58	0.0074	0.0052
Mercury	-25878-06-17 20:38 J	-7730348.76	-7730348.64	-7730348.51	0.0074	0.0044
Mercury	-25878-09-13 21:50 J	-7730260.71	-7730260.59	-7730260.45	0.0074	0.0037
Mercury	-25878-12-10 23:16 J	-7730172.67	-7730172.53	-7730172.38	0.0074	0.0029
Mercury	-25877-03-08 00:43 J	-7730084.62	-7730084.47	-7730084.32	0.0073	0.0021
Mercury	-25877-06-04 01:55 J	-7729996.57	-7729996.42	-7729996.27	0.0073	0.0013
Mercury	-25877-08-31 03:21 J	-7729908.52	-7729908.36	-7729908.21	0.0073	0.0006
Mercury	-25877-11-27 04:33 J	-7729820.46	-7729820.31	-7729820.16	0.0073	0.0002

Mercury	-25876-02-23 05:45 J	-7729732.41	-7729732.26	-7729732.11	0.0073	0.0010
Mercury	-25876-05-22 06:57 J	-7729644.35	-7729644.21	-7729644.06	0.0073	0.0017
Mercury	-25876-08-18 08:09 J	-7729556.30	-7729556.16	-7729556.01	0.0073	0.0024
Mercury	-25876-11-14 09:21 J	-7729468.24	-7729468.11	-7729467.97	0.0073	0.0032
Mercury	-25875-02-10 10:33 J	-7729380.18	-7729380.06	-7729379.93	0.0072	0.0039
Mercury	-25875-05-09 11:31 J	-7729292.12	-7729292.02	-7729291.89	0.0072	0.0047
Mercury	-25875-08-05 12:43 J	-7729204.06	-7729203.97	-7729203.85	0.0072	0.0053
Mercury	-25875-11-01 13:55 J	-7729115.99	-7729115.92	-7729115.82	0.0072	0.0060
Mercury	-25874-01-28 15:07 J	-7729027.91	-7729027.87	-7729027.80	0.0072	0.0067
Venus	-25732-03-17 14:52 J	-7677114.02	-7677113.88	-7677113.71	0.0064	0.0045
Venus	-25732-10-28 18:57 J	-7676888.93	-7676888.71	-7676888.50	0.0065	0.0007
Venus	-25731-06-10 22:33 J	-7676663.74	-7676663.56	-7676663.36	0.0065	0.0031
Mars	-25728-03-01 11:16 J	-7675669.09	-7675669.03	-7675668.88	0.0066	0.0062
Moon	-25723-07-16 03:07 J	-7673706.63	-7673706.37	-7673706.10	0.0068	0.0008
Earth	-25723-07-16 04:47 J	-7673706.55	-7673706.30	-7673706.04	0.0068	0.0011 *
Mercury	-25718-12-14 22:04 J	-7671728.62	-7671728.58	-7671728.50	0.0070	0.0066
Mercury	-25717-03-11 23:59 J	-7671640.59	-7671640.50	-7671640.41	0.0071	0.0058
Mercury	-25717-06-08 01:11 J	-7671552.55	-7671552.45	-7671552.33	0.0071	0.0051
Mercury	-25717-09-04 02:38 J	-7671464.51	-7671464.39	-7671464.26	0.0071	0.0044
Mercury	-25717-12-01 03:50 J	-7671376.47	-7671376.34	-7671376.19	0.0071	0.0037
Mercury	-25716-02-27 05:16 J	-7671288.42	-7671288.28	-7671288.12	0.0071	0.0030
Mercury	-25716-05-26 06:57 J	-7671200.36	-7671200.21	-7671200.05	0.0071	0.0022
Mercury	-25716-08-22 08:09 J	-7671112.31	-7671112.16	-7671111.99	0.0071	0.0016
Mercury	-25716-11-18 09:50 J	-7671024.25	-7671024.09	-7671023.93	0.0071	0.0007
Mercury	-25715-02-14 11:16 J	-7670936.19	-7670936.03	-7670935.86	0.0071	0.0001
Mercury	-25715-05-13 12:43 J	-7670848.13	-7670847.97	-7670847.80	0.0072	0.0008
Mercury	-25715-08-09 14:09 J	-7670760.07	-7670759.91	-7670759.75	0.0072	0.0016
Mercury	-25715-11-05 15:50 J	-7670672.00	-7670671.84	-7670671.69	0.0072	0.0023
Mercury	-25714-02-01 17:02 J	-7670583.93	-7670583.79	-7670583.63	0.0072	0.0031
Mercury	-25714-04-30 18:28 J	-7670495.86	-7670495.73	-7670495.58	0.0072	0.0039

Mercury	-25714-07-27 19:55 J	-7670407.78	-7670407.67	-7670407.53	0.0072	0.0047
Mercury	-25714-10-23 21:21 J	-7670319.70	-7670319.61	-7670319.48	0.0072	0.0055
Mercury	-25713-01-19 22:47 J	-7670231.60	-7670231.55	-7670231.44	0.0072	0.0064
Mercury	-25713-04-17 00:28 J	-7670143.49	-7670143.48	-7670143.43	0.0073	0.0072
Venus	-25644-06-29 09:35 J	-7644868.16	-7644868.10	-7644867.99	0.0080	0.0074
Venus	-25643-02-09 21:21 J	-7644642.83	-7644642.61	-7644642.38	0.0080	0.0002
Venus	-25643-09-23 08:09 J	-7644417.20	-7644417.16	-7644417.09	0.0080	0.0077
Moon	-25637-01-19 02:52 J	-7642473.57	-7642473.38	-7642473.15	0.0077	0.0044
Earth	-25637-01-19 05:02 J	-7642473.49	-7642473.29	-7642473.05	0.0077	0.0041 *
Mercury	-25633-08-22 06:43 J	-7640796.24	-7640796.22	-7640796.17	0.0074	0.0073
Mercury	-25633-11-18 08:09 J	-7640708.22	-7640708.16	-7640708.07	0.0074	0.0064
Mercury	-25632-02-14 09:35 J	-7640620.19	-7640620.10	-7640619.99	0.0074	0.0056
Mercury	-25632-05-13 11:02 J	-7640532.15	-7640532.04	-7640531.91	0.0074	0.0048
Mercury	-25632-08-09 12:28 J	-7640444.10	-7640443.98	-7640443.85	0.0074	0.0040
Mercury	-25632-11-05 13:55 J	-7640356.06	-7640355.92	-7640355.78	0.0074	0.0032
Mercury	-25631-02-01 15:07 J	-7640268.01	-7640267.87	-7640267.72	0.0074	0.0024
Mercury	-25631-04-30 16:33 J	-7640179.96	-7640179.81	-7640179.66	0.0073	0.0016
Mercury	-25631-07-27 17:45 J	-7640091.91	-7640091.76	-7640091.61	0.0073	0.0009
Mercury	-25631-10-23 19:11 J	-7640003.86	-7640003.70	-7640003.55	0.0073	0.0002
Mercury	-25630-01-19 20:23 J	-7639915.80	-7639915.65	-7639915.50	0.0073	0.0006
Mercury	-25630-04-17 21:35 J	-7639827.75	-7639827.60	-7639827.45	0.0073	0.0014
Mercury	-25630-07-14 22:47 J	-7639739.69	-7639739.55	-7639739.40	0.0073	0.0021
Mercury	-25630-10-10 23:45 J	-7639651.64	-7639651.51	-7639651.36	0.0073	0.0029
Mercury	-25629-01-07 01:11 J	-7639563.58	-7639563.45	-7639563.31	0.0073	0.0036
Mercury	-25629-04-04 02:23 J	-7639475.52	-7639475.40	-7639475.27	0.0072	0.0043
Mercury	-25629-07-01 03:21 J	-7639387.45	-7639387.36	-7639387.24	0.0072	0.0050
Mercury	-25629-09-27 04:33 J	-7639299.39	-7639299.31	-7639299.21	0.0072	0.0057
Mercury	-25629-12-24 05:45 J	-7639211.32	-7639211.26	-7639211.18	0.0072	0.0064
Mercury	-25628-03-22 06:43 J	-7639123.22	-7639123.22	-7639123.18	0.0072	0.0071
Venus	-25487-09-02 23:31 J	-7587458.55	-7587458.52	-7587458.45	0.0064	0.0063

Venus	-25486-04-16 03:21 J	-7587233.54	-7587233.36	-7587233.15	0.0064	0.0026
Venus	-25486-11-27 07:11 J	-7587008.40	-7587008.20	-7587007.98	0.0065	0.0013
Venus	-25485-07-09 10:33 J	-7586783.17	-7586783.06	-7586782.90	0.0065	0.0051
Moon	-25477-07-17 09:07 J	-7583853.37	-7583853.12	-7583852.86	0.0068	0.0012
Earth	-25477-07-17 12:14 J	-7583853.24	-7583852.99	-7583852.72	0.0068	0.0008 *
Mercury	-25472-11-09 13:26 J	-7581911.98	-7581911.94	-7581911.86	0.0070	0.0066
Mercury	-25471-02-05 14:52 J	-7581823.95	-7581823.88	-7581823.77	0.0071	0.0059
Mercury	-25471-05-04 16:19 J	-7581735.91	-7581735.82	-7581735.69	0.0071	0.0052
Mercury	-25471-07-31 17:59 J	-7581647.87	-7581647.75	-7581647.62	0.0071	0.0044
Mercury	-25471-10-27 19:11 J	-7581559.83	-7581559.70	-7581559.55	0.0071	0.0037
Mercury	-25470-01-23 20:38 J	-7581471.78	-7581471.64	-7581471.48	0.0071	0.0030
Mercury	-25470-04-21 22:19 J	-7581383.72	-7581383.57	-7581383.42	0.0071	0.0022
Mercury	-25470-07-18 23:31 J	-7581295.67	-7581295.52	-7581295.35	0.0071	0.0015
Mercury	-25470-10-15 01:11 J	-7581207.61	-7581207.45	-7581207.29	0.0071	0.0007
Mercury	-25469-01-11 02:38 J	-7581119.55	-7581119.39	-7581119.23	0.0072	0.0000
Mercury	-25469-04-08 04:04 J	-7581031.49	-7581031.33	-7581031.16	0.0072	0.0008
Mercury	-25469-07-05 05:31 J	-7580943.43	-7580943.27	-7580943.11	0.0072	0.0016
Mercury	-25469-10-01 06:57 J	-7580855.36	-7580855.21	-7580855.05	0.0072	0.0023
Mercury	-25469-12-28 08:23 J	-7580767.29	-7580767.15	-7580766.99	0.0072	0.0031
Mercury	-25468-03-26 09:50 J	-7580679.22	-7580679.09	-7580678.94	0.0072	0.0039
Mercury	-25468-06-22 11:16 J	-7580591.14	-7580591.03	-7580590.89	0.0072	0.0047
Mercury	-25468-09-18 12:43 J	-7580503.05	-7580502.97	-7580502.84	0.0072	0.0056
Mercury	-25468-12-15 14:23 J	-7580414.96	-7580414.90	-7580414.80	0.0072	0.0063
Mercury	-25467-03-13 15:50 J	-7580326.84	-7580326.84	-7580326.79	0.0073	0.0072
Venus	-25398-07-29 00:28 J	-7554987.67	-7554987.48	-7554987.28	0.0080	0.0040
Venus	-25397-03-10 11:31 J	-7554762.21	-7554762.02	-7554761.81	0.0080	0.0036
Earth	-25391-01-20 13:55 J	-7552620.17	-7552619.92	-7552619.66	0.0077	0.0017
Moon	-25391-01-20 16:47 J	-7552620.04	-7552619.80	-7552619.54	0.0077	0.0019 *
Mercury	-25387-07-18 22:04 J	-7550979.59	-7550979.58	-7550979.54	0.0074	0.0073
Mercury	-25387-10-14 23:16 J	-7550891.58	-7550891.53	-7550891.43	0.0074	0.0066

Mercury	-25386-01-11 00:43 J	-7550803.55	-7550803.47	-7550803.35	0.0074	0.0057
Mercury	-25386-04-09 02:09 J	-7550715.51	-7550715.41	-7550715.28	0.0074	0.0049
Mercury	-25386-07-06 03:35 J	-7550627.47	-7550627.35	-7550627.21	0.0074	0.0041
Mercury	-25386-10-02 05:02 J	-7550539.42	-7550539.29	-7550539.15	0.0074	0.0033
Mercury	-25386-12-29 06:28 J	-7550451.37	-7550451.23	-7550451.09	0.0073	0.0025
Mercury	-25385-03-26 07:40 J	-7550363.32	-7550363.18	-7550363.03	0.0073	0.0017
Mercury	-25385-06-22 09:07 J	-7550275.27	-7550275.12	-7550274.97	0.0073	0.0009
Mercury	-25385-09-18 10:19 J	-7550187.22	-7550187.07	-7550186.92	0.0073	0.0002
Mercury	-25385-12-15 11:31 J	-7550099.17	-7550099.02	-7550098.86	0.0073	0.0006
Mercury	-25384-03-13 12:57 J	-7550011.11	-7550010.96	-7550010.81	0.0073	0.0013
Mercury	-25384-06-09 13:55 J	-7549923.06	-7549922.92	-7549922.77	0.0073	0.0021
Mercury	-25384-09-05 15:21 J	-7549835.00	-7549834.86	-7549834.72	0.0073	0.0028
Mercury	-25384-12-02 16:19 J	-7549746.94	-7549746.82	-7549746.68	0.0072	0.0035
Mercury	-25383-02-28 17:31 J	-7549658.88	-7549658.77	-7549658.64	0.0072	0.0042
Mercury	-25383-05-27 18:43 J	-7549570.82	-7549570.72	-7549570.60	0.0072	0.0050
Mercury	-25383-08-23 19:55 J	-7549482.75	-7549482.67	-7549482.57	0.0072	0.0057
Mercury	-25383-11-19 21:07 J	-7549394.68	-7549394.62	-7549394.54	0.0072	0.0063
Mercury	-25382-02-15 22:19 J	-7549306.59	-7549306.57	-7549306.54	0.0072	0.0070
Venus	-25241-10-01 11:59 J	-7497578.15	-7497578.00	-7497577.84	0.0064	0.0046
Venus	-25240-05-14 15:50 J	-7497353.05	-7497352.84	-7497352.62	0.0065	0.0009
Venus	-25240-12-25 19:11 J	-7497127.87	-7497127.70	-7497127.49	0.0065	0.0030
Mars	-25237-01-23 16:04 J	-7496369.02	-7496368.83	-7496368.58	0.0065	0.0047
Earth	-25231-07-19 17:59 J	-7493999.97	-7493999.75	-7493999.48	0.0068	0.0024
Moon	-25231-07-19 20:23 J	-7493999.87	-7493999.65	-7493999.41	0.0068	0.0027 *
Mercury	-25226-10-06 04:33 J	-7492095.35	-7492095.31	-7492095.24	0.0071	0.0067
Mercury	-25225-01-02 05:45 J	-7492007.32	-7492007.26	-7492007.15	0.0071	0.0060
Mercury	-25225-03-30 07:11 J	-7491919.29	-7491919.20	-7491919.07	0.0071	0.0053
Mercury	-25225-06-26 08:52 J	-7491831.25	-7491831.13	-7491831.00	0.0071	0.0045
Mercury	-25225-09-22 10:04 J	-7491743.20	-7491743.08	-7491742.93	0.0071	0.0038
Mercury	-25225-12-19 11:31 J	-7491655.15	-7491655.02	-7491654.86	0.0071	0.0031

Mercury	-25224-03-17 13:11 J	-7491567.10	-7491566.95	-7491566.79	0.0071	0.0023
Mercury	-25224-06-13 14:23 J	-7491479.05	-7491478.90	-7491478.73	0.0071	0.0017
Mercury	-25224-09-09 16:04 J	-7491390.99	-7491390.83	-7491390.67	0.0071	0.0008
Mercury	-25224-12-06 17:31 J	-7491302.93	-7491302.77	-7491302.60	0.0072	0.0001
Mercury	-25223-03-04 18:57 J	-7491214.87	-7491214.71	-7491214.54	0.0072	0.0007
Mercury	-25223-05-31 20:23 J	-7491126.81	-7491126.65	-7491126.48	0.0072	0.0015
Mercury	-25223-08-27 22:04 J	-7491038.74	-7491038.58	-7491038.43	0.0072	0.0022
Mercury	-25223-11-23 23:16 J	-7490950.67	-7490950.53	-7490950.37	0.0072	0.0030
Mercury	-25222-02-20 00:43 J	-7490862.60	-7490862.47	-7490862.32	0.0072	0.0038
Mercury	-25222-05-19 02:09 J	-7490774.52	-7490774.41	-7490774.27	0.0072	0.0046
Mercury	-25222-08-15 03:35 J	-7490686.44	-7490686.35	-7490686.22	0.0072	0.0055
Mercury	-25222-11-11 05:16 J	-7490598.35	-7490598.28	-7490598.18	0.0072	0.0063
Mercury	-25221-02-07 06:43 J	-7490510.24	-7490510.22	-7490510.16	0.0073	0.0071
Venus	-25152-08-26 14:23 J	-7465107.12	-7465106.90	-7465106.68	0.0080	0.0008
Venus	-25151-04-09 00:43 J	-7464881.56	-7464881.47	-7464881.32	0.0080	0.0067
Mars	-25150-06-07 17:31 J	-7464456.93	-7464456.77	-7464456.53	0.0079	0.0063
Earth	-25145-01-22 21:21 J	-7462766.87	-7462766.61	-7462766.35	0.0077	0.0005
Moon	-25145-01-22 22:47 J	-7462766.82	-7462766.55	-7462766.28	0.0077	0.0004 *
Mercury	-25141-09-09 14:52 J	-7461074.94	-7461074.88	-7461074.81	0.0074	0.0066
Mercury	-25141-12-06 16:04 J	-7460986.91	-7460986.83	-7460986.72	0.0074	0.0058
Mercury	-25140-03-04 17:31 J	-7460898.87	-7460898.77	-7460898.65	0.0074	0.0050
Mercury	-25140-05-31 18:57 J	-7460810.83	-7460810.71	-7460810.58	0.0074	0.0042
Mercury	-25140-08-27 20:23 J	-7460722.78	-7460722.65	-7460722.51	0.0074	0.0034
Mercury	-25140-11-23 21:35 J	-7460634.74	-7460634.60	-7460634.45	0.0073	0.0026
Mercury	-25139-02-19 23:02 J	-7460546.69	-7460546.54	-7460546.39	0.0073	0.0018
Mercury	-25139-05-19 00:14 J	-7460458.64	-7460458.49	-7460458.33	0.0073	0.0011
Mercury	-25139-08-15 01:40 J	-7460370.59	-7460370.43	-7460370.28	0.0073	0.0003
Mercury	-25139-11-11 02:52 J	-7460282.53	-7460282.38	-7460282.23	0.0073	0.0005
Mercury	-25138-02-07 04:04 J	-7460194.48	-7460194.33	-7460194.18	0.0073	0.0012
Mercury	-25138-05-06 05:16 J	-7460106.42	-7460106.28	-7460106.13	0.0073	0.0020

Mercury	-25138-08-02 06:28 J	-7460018.37	-7460018.23	-7460018.08	0.0073	0.0027
Mercury	-25138-10-29 07:26 J	-7459930.31	-7459930.19	-7459930.04	0.0072	0.0035
Mercury	-25137-01-25 08:38 J	-7459842.25	-7459842.14	-7459842.00	0.0072	0.0042
Mercury	-25137-04-22 10:04 J	-7459754.19	-7459754.08	-7459753.96	0.0072	0.0048
Mercury	-25137-07-19 11:16 J	-7459666.12	-7459666.03	-7459665.93	0.0072	0.0056
Mercury	-25137-10-15 11:59 J	-7459578.05	-7459578.00	-7459577.91	0.0072	0.0063
Mercury	-25136-01-11 13:11 J	-7459489.96	-7459489.95	-7459489.89	0.0072	0.0070

# 25TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 25th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-24995-03-19 22:04 J	-7407922.64	-7407922.58	-7407922.51	0.0064	0.0061		
Venus	-24995-10-31 01:40 J	-7407697.62	-7407697.43	-7407697.22	0.0064	0.0024		
Venus	-24994-06-13 05:31 J	-7407472.48	-7407472.27	-7407472.05	0.0065	0.0014		
Venus	-24993-01-24 08:52 J	-7407247.24	-7407247.13	-7407246.98	0.0065	0.0052		
Mars	-24991-06-16 13:55 J	-7406373.18	-7406372.92	-7406372.61	0.0066	0.0028		
Moon	-24986-07-20 08:23 J	-7404513.30	-7404513.15	-7404512.97	0.0068	0.0052		
Earth	-24986-07-20 11:31 J	-7404513.17	-7404513.02	-7404512.81	0.0068	0.0049	*	
Earth	-24985-07-21 03:21 J	-7404146.51	-7404146.36	-7404146.16	0.0068	0.0050		
Moon	-24985-07-21 05:59 J	-7404146.38	-7404146.25	-7404146.05	0.0068	0.0054	*	
Mercury	-24980-08-31 20:52 J	-7402278.69	-7402278.63	-7402278.56	0.0071	0.0065		
Mercury	-24980-11-27 22:04 J	-7402190.66	-7402190.58	-7402190.48	0.0071	0.0058		



Mercury	-24979-02-23 23:16 J	-7402102.62	-7402102.53	-7402102.40	0.0071	0.0051
Mercury	-24979-05-23 00:43 J	-7402014.58	-7402014.47	-7402014.33	0.0071	0.0044
Mercury	-24979-08-19 02:23 J	-7401926.54	-7401926.40	-7401926.26	0.0071	0.0036
Mercury	-24979-11-15 03:35 J	-7401838.49	-7401838.35	-7401838.19	0.0071	0.0029
Mercury	-24978-02-11 05:16 J	-7401750.43	-7401750.28	-7401750.12	0.0071	0.0021
Mercury	-24978-05-10 06:28 J	-7401662.38	-7401662.23	-7401662.06	0.0071	0.0014
Mercury	-24978-08-06 08:09 J	-7401574.32	-7401574.16	-7401574.00	0.0072	0.0006
Mercury	-24978-11-02 09:35 J	-7401486.26	-7401486.10	-7401485.94	0.0072	0.0001
Mercury	-24977-01-29 11:02 J	-7401398.20	-7401398.04	-7401397.88	0.0072	0.0009
Mercury	-24977-04-26 12:28 J	-7401310.14	-7401309.98	-7401309.82	0.0072	0.0017
Mercury	-24977-07-23 13:40 J	-7401222.07	-7401221.93	-7401221.76	0.0072	0.0025
Mercury	-24977-10-19 15:21 J	-7401134.00	-7401133.86	-7401133.71	0.0072	0.0033
Mercury	-24976-01-15 16:47 J	-7401045.93	-7401045.80	-7401045.65	0.0072	0.0041
Mercury	-24976-04-13 18:14 J	-7400957.85	-7400957.74	-7400957.60	0.0072	0.0049
Mercury	-24976-07-10 19:55 J	-7400869.76	-7400869.67	-7400869.56	0.0072	0.0057
Mercury	-24976-10-06 21:21 J	-7400781.67	-7400781.61	-7400781.52	0.0073	0.0065
Venus	-24906-02-11 19:55 J	-7375451.85	-7375451.67	-7375451.45	0.0080	0.0040
Venus	-24906-09-25 07:26 J	-7375226.38	-7375226.19	-7375225.98	0.0080	0.0036
Mars	-24904-10-30 10:04 J	-7374460.08	-7374460.08	-7374460.02	0.0079	0.0079
Moon	-24899-01-24 06:14 J	-7372913.44	-7372913.24	-7372913.00	0.0076	0.0043
Earth	-24899-01-24 10:04 J	-7372913.29	-7372913.08	-7372912.86	0.0076	0.0042 *
Mercury	-24895-05-10 05:31 J	-7371346.29	-7371346.27	-7371346.23	0.0074	0.0072
Mercury	-24895-08-06 06:57 J	-7371258.28	-7371258.21	-7371258.13	0.0074	0.0064
Mercury	-24895-11-02 08:09 J	-7371170.24	-7371170.16	-7371170.05	0.0074	0.0056
Mercury	-24894-01-29 09:35 J	-7371082.20	-7371082.10	-7371081.97	0.0074	0.0048
Mercury	-24894-04-27 11:02 J	-7370994.16	-7370994.04	-7370993.90	0.0074	0.0040
Mercury	-24894-07-24 12:28 J	-7370906.12	-7370905.98	-7370905.84	0.0073	0.0032
Mercury	-24894-10-20 13:40 J	-7370818.07	-7370817.93	-7370817.78	0.0073	0.0024
Mercury	-24893-01-16 15:07 J	-7370730.02	-7370729.87	-7370729.72	0.0073	0.0016
Mercury	-24893-04-13 16:19 J	-7370641.97	-7370641.82	-7370641.66	0.0073	0.0009

Mercury	-24893-07-10 17:45 J	-7370553.92	-7370553.76	-7370553.61	0.0073	0.0001
Mercury	-24893-10-06 18:57 J	-7370465.86	-7370465.71	-7370465.56	0.0073	0.0007
Mercury	-24892-01-02 20:09 J	-7370377.81	-7370377.66	-7370377.51	0.0073	0.0014
Mercury	-24892-03-31 21:21 J	-7370289.75	-7370289.61	-7370289.46	0.0073	0.0022
Mercury	-24892-06-27 22:33 J	-7370201.69	-7370201.56	-7370201.42	0.0072	0.0029
Mercury	-24892-09-23 23:31 J	-7370113.64	-7370113.52	-7370113.37	0.0072	0.0037
Mercury	-24892-12-21 00:57 J	-7370025.58	-7370025.46	-7370025.33	0.0072	0.0043
Mercury	-24891-03-19 02:09 J	-7369937.51	-7369937.41	-7369937.30	0.0072	0.0051
Mercury	-24891-06-15 03:07 J	-7369849.45	-7369849.37	-7369849.27	0.0072	0.0058
Mercury	-24891-09-11 04:19 J	-7369761.37	-7369761.32	-7369761.24	0.0072	0.0065
Mercury	-24891-12-08 05:31 J	-7369673.27	-7369673.27	-7369673.25	0.0072	0.0072
Venus	-24749-04-17 10:04 J	-7318042.22	-7318042.08	-7318041.89	0.0064	0.0043
Venus	-24749-11-28 14:09 J	-7317817.12	-7317816.91	-7317816.69	0.0064	0.0006
Venus	-24748-07-11 17:45 J	-7317591.93	-7317591.76	-7317591.56	0.0065	0.0033
Earth	-24740-07-21 18:57 J	-7314659.92	-7314659.71	-7314659.45	0.0068	0.0030
Moon	-24740-07-21 20:23 J	-7314659.85	-7314659.65	-7314659.42	0.0068	0.0033 *
Mercury	-24734-07-28 11:45 J	-7312462.04	-7312462.01	-7312461.93	0.0071	0.0066
Mercury	-24734-10-24 13:40 J	-7312374.02	-7312373.93	-7312373.84	0.0071	0.0058
Mercury	-24733-01-20 14:52 J	-7312285.98	-7312285.88	-7312285.76	0.0071	0.0051
Mercury	-24733-04-17 16:04 J	-7312197.94	-7312197.83	-7312197.69	0.0071	0.0044
Mercury	-24733-07-14 17:45 J	-7312109.90	-7312109.76	-7312109.62	0.0071	0.0037
Mercury	-24733-10-10 18:57 J	-7312021.85	-7312021.71	-7312021.55	0.0071	0.0030
Mercury	-24732-01-06 20:38 J	-7311933.79	-7311933.64	-7311933.48	0.0071	0.0022
Mercury	-24732-04-04 21:50 J	-7311845.74	-7311845.59	-7311845.42	0.0071	0.0015
Mercury	-24732-07-01 23:31 J	-7311757.68	-7311757.52	-7311757.36	0.0072	0.0007
Mercury	-24732-09-28 00:57 J	-7311669.62	-7311669.46	-7311669.30	0.0072	0.0001
Mercury	-24732-12-25 02:23 J	-7311581.56	-7311581.40	-7311581.24	0.0072	0.0009
Mercury	-24731-03-23 03:50 J	-7311493.50	-7311493.34	-7311493.18	0.0072	0.0017
Mercury	-24731-06-19 05:02 J	-7311405.43	-7311405.29	-7311405.12	0.0072	0.0026
Mercury	-24731-09-15 06:57 J	-7311317.36	-7311317.21	-7311317.06	0.0072	0.0032

Mercury	-24731-12-12 08:23 J	-7311229.28	-7311229.15	-7311229.01	0.0072	0.0041
Mercury	-24730-03-10 09:50 J	-7311141.20	-7311141.09	-7311140.96	0.0072	0.0049
Mercury	-24730-06-06 11:16 J	-7311053.12	-7311053.03	-7311052.92	0.0073	0.0057
Mercury	-24730-09-02 12:57 J	-7310965.03	-7310964.96	-7310964.88	0.0073	0.0065
Venus	-24661-07-29 23:31 J	-7285796.53	-7285796.52	-7285796.46	0.0080	0.0080
Venus	-24660-03-12 11:02 J	-7285571.26	-7285571.04	-7285570.81	0.0080	0.0004
Venus	-24660-10-23 22:04 J	-7285345.67	-7285345.58	-7285345.47	0.0080	0.0071
Earth	-24654-01-24 17:59 J	-7283426.81	-7283426.75	-7283426.62	0.0077	0.0072
Moon	-24654-01-24 20:23 J	-7283426.71	-7283426.65	-7283426.52	0.0077	0.0072 *
Moon	-24653-01-26 18:57 J	-7283059.80	-7283059.71	-7283059.62	0.0076	0.0071
Earth	-24653-01-26 19:11 J	-7283059.79	-7283059.70	-7283059.58	0.0076	0.0070 *
Mercury	-24649-04-04 20:52 J	-7281529.65	-7281529.63	-7281529.58	0.0074	0.0072
Mercury	-24649-07-01 22:19 J	-7281441.63	-7281441.57	-7281441.48	0.0074	0.0064
Mercury	-24649-09-27 23:31 J	-7281353.60	-7281353.52	-7281353.40	0.0074	0.0056
Mercury	-24649-12-25 00:57 J	-7281265.56	-7281265.46	-7281265.33	0.0074	0.0048
Mercury	-24648-03-23 02:23 J	-7281177.52	-7281177.40	-7281177.26	0.0074	0.0040
Mercury	-24648-06-19 03:50 J	-7281089.47	-7281089.34	-7281089.20	0.0073	0.0032
Mercury	-24648-09-15 05:16 J	-7281001.43	-7281001.28	-7281001.14	0.0073	0.0024
Mercury	-24648-12-12 06:28 J	-7280913.38	-7280913.23	-7280913.08	0.0073	0.0016
Mercury	-24647-03-10 07:55 J	-7280825.33	-7280825.17	-7280825.02	0.0073	0.0008
Mercury	-24647-06-06 09:07 J	-7280737.27	-7280737.12	-7280736.97	0.0073	0.0001
Mercury	-24647-09-02 10:19 J	-7280649.22	-7280649.07	-7280648.91	0.0073	0.0007
Mercury	-24647-11-29 11:31 J	-7280561.16	-7280561.02	-7280560.86	0.0073	0.0015
Mercury	-24646-02-25 12:43 J	-7280473.11	-7280472.97	-7280472.82	0.0073	0.0022
Mercury	-24646-05-24 13:55 J	-7280385.05	-7280384.92	-7280384.77	0.0072	0.0029
Mercury	-24646-08-20 15:07 J	-7280296.99	-7280296.87	-7280296.73	0.0072	0.0037
Mercury	-24646-11-16 16:33 J	-7280208.93	-7280208.81	-7280208.69	0.0072	0.0044
Mercury	-24645-02-12 17:16 J	-7280120.87	-7280120.78	-7280120.65	0.0072	0.0052
Mercury	-24645-05-10 18:43 J	-7280032.80	-7280032.72	-7280032.62	0.0072	0.0058
Mercury	-24645-08-06 19:40 J	-7279944.72	-7279944.68	-7279944.60	0.0072	0.0065

Venus	-24504-10-03 20:09 J	-7228386.73	-7228386.66	-7228386.54	0.0064	0.0057
Venus	-24503-05-17 00:14 J	-7228161.68	-7228161.49	-7228161.27	0.0064	0.0020
Venus	-24503-12-28 03:50 J	-7227936.53	-7227936.34	-7227936.11	0.0065	0.0018
Venus	-24502-08-10 07:40 J	-7227711.28	-7227711.18	-7227711.05	0.0065	0.0055
Earth	-24494-07-24 05:02 J	-7224806.54	-7224806.29	-7224806.02	0.0068	0.0004
Moon	-24494-07-24 08:09 J	-7224806.42	-7224806.16	-7224805.89	0.0068	0.0007 *
Mercury	-24488-03-27 02:38 J	-7222733.39	-7222733.39	-7222733.37	0.0071	0.0070
Mercury	-24488-06-23 03:50 J	-7222645.39	-7222645.34	-7222645.25	0.0071	0.0064
Mercury	-24488-09-19 05:31 J	-7222557.36	-7222557.27	-7222557.17	0.0071	0.0056
Mercury	-24488-12-16 06:43 J	-7222469.33	-7222469.22	-7222469.09	0.0071	0.0049
Mercury	-24487-03-14 07:55 J	-7222381.28	-7222381.17	-7222381.02	0.0071	0.0042
Mercury	-24487-06-10 09:35 J	-7222293.24	-7222293.10	-7222292.95	0.0071	0.0034
Mercury	-24487-09-06 10:47 J	-7222205.19	-7222205.05	-7222204.88	0.0071	0.0028
Mercury	-24487-12-03 12:28 J	-7222117.13	-7222116.98	-7222116.82	0.0071	0.0020
Mercury	-24486-03-01 13:55 J	-7222029.08	-7222028.92	-7222028.76	0.0072	0.0012
Mercury	-24486-05-28 15:21 J	-7221941.02	-7221940.86	-7221940.69	0.0072	0.0005
Mercury	-24486-08-24 16:47 J	-7221852.96	-7221852.80	-7221852.63	0.0072	0.0004
Mercury	-24486-11-20 18:28 J	-7221764.90	-7221764.73	-7221764.57	0.0072	0.0011
Mercury	-24485-02-16 19:40 J	-7221676.83	-7221676.68	-7221676.51	0.0072	0.0019
Mercury	-24485-05-14 21:07 J	-7221588.76	-7221588.62	-7221588.46	0.0072	0.0027
Mercury	-24485-08-10 22:33 J	-7221500.69	-7221500.56	-7221500.40	0.0072	0.0035
Mercury	-24485-11-06 23:59 J	-7221412.61	-7221412.50	-7221412.35	0.0072	0.0044
Mercury	-24484-02-03 01:40 J	-7221324.53	-7221324.43	-7221324.30	0.0072	0.0051
Mercury	-24484-05-02 03:07 J	-7221236.45	-7221236.37	-7221236.26	0.0073	0.0060
Mercury	-24484-07-29 04:47 J	-7221148.35	-7221148.30	-7221148.23	0.0073	0.0068
Venus	-24415-08-28 17:16 J	-7195915.98	-7195915.78	-7195915.57	0.0080	0.0034
Venus	-24414-04-11 04:19 J	-7195690.51	-7195690.32	-7195690.12	0.0080	0.0041
Moon	-24408-01-26 04:19 J	-7193573.55	-7193573.32	-7193573.08	0.0077	0.0034
Earth	-24408-01-26 07:11 J	-7193573.42	-7193573.20	-7193572.95	0.0077	0.0033 *
Mercury	-24403-03-01 13:26 J	-7191712.99	-7191712.94	-7191712.89	0.0074	0.0069

Mercury	-24403-05-28 14:38 J	-7191624.97	-7191624.89	-7191624.80	0.0074	0.0061
Mercury	-24403-08-24 16:04 J	-7191536.93	-7191536.83	-7191536.72	0.0074	0.0053
Mercury	-24403-11-20 17:31 J	-7191448.89	-7191448.77	-7191448.65	0.0074	0.0045
Mercury	-24402-02-16 18:28 J	-7191360.85	-7191360.73	-7191360.58	0.0073	0.0038
Mercury	-24402-05-15 19:55 J	-7191272.80	-7191272.67	-7191272.52	0.0073	0.0029
Mercury	-24402-08-11 21:21 J	-7191184.75	-7191184.61	-7191184.46	0.0073	0.0021
Mercury	-24402-11-07 22:47 J	-7191096.70	-7191096.55	-7191096.40	0.0073	0.0013
Mercury	-24401-02-03 23:59 J	-7191008.65	-7191008.50	-7191008.34	0.0073	0.0006
Mercury	-24401-05-02 01:11 J	-7190920.60	-7190920.45	-7190920.29	0.0073	0.0003
Mercury	-24401-07-29 02:23 J	-7190832.55	-7190832.40	-7190832.24	0.0073	0.0010
Mercury	-24401-10-25 03:50 J	-7190744.49	-7190744.34	-7190744.19	0.0073	0.0017
Mercury	-24400-01-21 04:47 J	-7190656.43	-7190656.30	-7190656.15	0.0072	0.0025
Mercury	-24400-04-19 06:14 J	-7190568.38	-7190568.24	-7190568.10	0.0072	0.0032
Mercury	-24400-07-16 07:11 J	-7190480.32	-7190480.20	-7190480.06	0.0072	0.0039
Mercury	-24400-10-12 08:23 J	-7190392.25	-7190392.15	-7190392.02	0.0072	0.0046
Mercury	-24399-01-08 09:35 J	-7190304.19	-7190304.10	-7190303.99	0.0072	0.0053
Mercury	-24399-04-06 11:02 J	-7190216.12	-7190216.04	-7190215.96	0.0072	0.0060
Mercury	-24399-07-03 11:45 J	-7190128.04	-7190128.01	-7190127.94	0.0072	0.0068
Venus	-24258-11-02 08:52 J	-7138506.28	-7138506.13	-7138505.94	0.0064	0.0039
Venus	-24257-06-14 12:57 J	-7138281.17	-7138280.96	-7138280.74	0.0065	0.0002
Venus	-24256-01-25 16:19 J	-7138055.98	-7138055.82	-7138055.62	0.0065	0.0036
Mars	-24254-10-01 16:47 J	-7137077.11	-7137076.80	-7137076.48	0.0066	0.0002
Moon	-24248-07-25 09:50 J	-7134953.34	-7134953.09	-7134952.81	0.0068	0.0014
Earth	-24248-07-25 12:14 J	-7134953.23	-7134952.99	-7134952.73	0.0068	0.0016 *
Mercury	-24242-05-19 19:11 J	-7132828.75	-7132828.70	-7132828.62	0.0071	0.0064
Mercury	-24242-08-15 20:23 J	-7132740.72	-7132740.65	-7132740.53	0.0071	0.0057
Mercury	-24242-11-11 22:04 J	-7132652.69	-7132652.58	-7132652.46	0.0071	0.0049
Mercury	-24241-02-07 23:16 J	-7132564.64	-7132564.53	-7132564.38	0.0071	0.0042
Mercury	-24241-05-06 00:57 J	-7132476.60	-7132476.46	-7132476.32	0.0071	0.0034
Mercury	-24241-08-02 02:09 J	-7132388.55	-7132388.41	-7132388.25	0.0071	0.0027

Mercury	-24241-10-29 03:50 J	-7132300.50	-7132300.34	-7132300.18	0.0071	0.0020
Mercury	-24240-01-25 05:16 J	-7132212.44	-7132212.28	-7132212.12	0.0072	0.0012
Mercury	-24240-04-23 06:43 J	-7132124.38	-7132124.22	-7132124.06	0.0072	0.0004
Mercury	-24240-07-20 08:09 J	-7132036.32	-7132036.16	-7132036.00	0.0072	0.0003
Mercury	-24240-10-16 09:35 J	-7131948.26	-7131948.10	-7131947.94	0.0072	0.0011
Mercury	-24239-01-12 11:02 J	-7131860.19	-7131860.04	-7131859.88	0.0072	0.0019
Mercury	-24239-04-10 12:28 J	-7131772.12	-7131771.98	-7131771.82	0.0072	0.0027
Mercury	-24239-07-07 13:55 J	-7131684.05	-7131683.92	-7131683.77	0.0072	0.0035
Mercury	-24239-10-03 15:21 J	-7131595.98	-7131595.86	-7131595.72	0.0072	0.0044
Mercury	-24239-12-30 16:47 J	-7131507.90	-7131507.80	-7131507.67	0.0073	0.0052
Mercury	-24238-03-28 18:28 J	-7131419.81	-7131419.73	-7131419.62	0.0073	0.0060
Mercury	-24238-06-24 20:09 J	-7131331.71	-7131331.66	-7131331.60	0.0073	0.0068
Venus	-24169-02-13 20:23 J	-7106260.70	-7106260.65	-7106260.55	0.0080	0.0076
Venus	-24169-09-26 08:09 J	-7106035.38	-7106035.16	-7106034.93	0.0080	0.0001
Venus	-24168-05-09 18:28 J	-7105809.78	-7105809.73	-7105809.62	0.0080	0.0075
Mars	-24166-02-14 04:04 J	-7105164.61	-7105164.33	-7105164.04	0.0079	0.0036
Moon	-24162-01-28 14:38 J	-7103720.14	-7103719.89	-7103719.64	0.0077	0.0008
Earth	-24162-01-28 16:33 J	-7103720.07	-7103719.81	-7103719.55	0.0077	0.0006 *
Mercury	-24157-01-26 04:33 J	-7101896.34	-7101896.31	-7101896.25	0.0074	0.0070
Mercury	-24157-04-23 05:59 J	-7101808.32	-7101808.25	-7101808.15	0.0074	0.0062
Mercury	-24157-07-20 07:11 J	-7101720.29	-7101720.20	-7101720.08	0.0074	0.0054
Mercury	-24157-10-16 08:38 J	-7101632.25	-7101632.14	-7101632.00	0.0074	0.0046
Mercury	-24156-01-12 10:04 J	-7101544.20	-7101544.08	-7101543.94	0.0073	0.0037
Mercury	-24156-04-10 11:31 J	-7101456.16	-7101456.02	-7101455.87	0.0073	0.0029
Mercury	-24156-07-07 12:57 J	-7101368.11	-7101367.96	-7101367.81	0.0073	0.0021
Mercury	-24156-10-03 14:09 J	-7101280.06	-7101279.91	-7101279.76	0.0073	0.0014
Mercury	-24156-12-30 15:21 J	-7101192.01	-7101191.86	-7101191.70	0.0073	0.0006
Mercury	-24155-03-28 16:47 J	-7101103.96	-7101103.80	-7101103.65	0.0073	0.0002
Mercury	-24155-06-24 17:59 J	-7101015.90	-7101015.75	-7101015.60	0.0073	0.0009
Mercury	-24155-09-20 19:11 J	-7100927.85	-7100927.70	-7100927.55	0.0073	0.0017

Mercury	-24155-12-17 20:23 J	-7100839.79	-7100839.65	-7100839.50	0.0072	0.0025
Mercury	-24154-03-15 21:21 J	-7100751.73	-7100751.61	-7100751.46	0.0072	0.0032
Mercury	-24154-06-11 22:47 J	-7100663.67	-7100663.55	-7100663.42	0.0072	0.0039
Mercury	-24154-09-07 23:59 J	-7100575.61	-7100575.50	-7100575.38	0.0072	0.0046
Mercury	-24154-12-05 00:57 J	-7100487.55	-7100487.46	-7100487.35	0.0072	0.0054
Mercury	-24153-03-02 02:09 J	-7100399.48	-7100399.41	-7100399.32	0.0072	0.0061
Mercury	-24153-05-29 03:21 J	-7100311.40	-7100311.36	-7100311.30	0.0072	0.0068
Venus	-24012-04-19 18:43 J	-7048850.81	-7048850.72	-7048850.58	0.0064	0.0055
Venus	-24012-11-30 22:47 J	-7048625.75	-7048625.55	-7048625.33	0.0064	0.0018
Venus	-24011-07-14 02:38 J	-7048400.59	-7048400.39	-7048400.18	0.0065	0.0020
Venus	-24010-02-24 05:59 J	-7048175.32	-7048175.25	-7048175.13	0.0065	0.0058
Earth	-24003-07-26 05:59 J	-7045466.38	-7045466.25	-7045466.10	0.0068	0.0056
Moon	-24003-07-26 09:07 J	-7045466.24	-7045466.12	-7045465.93	0.0068	0.0054 *
Moon	-24002-07-27 18:57 J	-7045099.88	-7045099.71	-7045099.48	0.0068	0.0042
Earth	-24002-07-27 21:21 J	-7045099.78	-7045099.61	-7045099.38	0.0068	0.0043 *

# 24TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 24th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-23996-01-16 10:04 J	-7043100.11	-7043100.08	-7043100.04	0.0071	0.0069		
Mercury	-23996-04-14 11:16 J	-7043012.09	-7043012.03	-7043011.94	0.0071	0.0062		
Mercury	-23996-07-11 12:28 J	-7042924.06	-7042923.98	-7042923.86	0.0071	0.0055		

Mercury	-23996-10-07 14:09 J	-7042836.02	-7042835.91	-7042835.78	0.0071	0.0047
Mercury	-23995-01-03 15:21 J	-7042747.98	-7042747.86	-7042747.71	0.0071	0.0040
Mercury	-23995-04-01 17:02 J	-7042659.93	-7042659.79	-7042659.64	0.0071	0.0032
Mercury	-23995-06-28 18:28 J	-7042571.88	-7042571.73	-7042571.58	0.0071	0.0025
Mercury	-23995-09-24 19:40 J	-7042483.83	-7042483.68	-7042483.51	0.0072	0.0018
Mercury	-23995-12-21 21:21 J	-7042395.77	-7042395.61	-7042395.45	0.0072	0.0010
Mercury	-23994-03-19 22:47 J	-7042307.71	-7042307.55	-7042307.39	0.0072	0.0002
Mercury	-23994-06-16 00:14 J	-7042219.65	-7042219.49	-7042219.33	0.0072	0.0006
Mercury	-23994-09-12 01:40 J	-7042131.59	-7042131.43	-7042131.27	0.0072	0.0014
Mercury	-23994-12-09 02:52 J	-7042043.52	-7042043.38	-7042043.21	0.0072	0.0022
Mercury	-23993-03-06 04:19 J	-7041955.45	-7041955.32	-7041955.16	0.0072	0.0031
Mercury	-23993-06-02 05:45 J	-7041867.38	-7041867.26	-7041867.10	0.0072	0.0039
Mercury	-23993-08-29 07:11 J	-7041779.31	-7041779.20	-7041779.05	0.0073	0.0047
Mercury	-23993-11-25 08:52 J	-7041691.22	-7041691.13	-7041691.01	0.0073	0.0055
Mercury	-23992-02-21 10:19 J	-7041603.13	-7041603.07	-7041602.97	0.0073	0.0063
Mercury	-23992-05-20 11:59 J	-7041515.02	-7041515.00	-7041514.95	0.0073	0.0071
Venus	-23923-03-14 14:09 J	-7016380.12	-7016379.91	-7016379.70	0.0080	0.0031
Venus	-23923-10-26 00:57 J	-7016154.63	-7016154.46	-7016154.26	0.0080	0.0044
Earth	-23916-01-30 04:47 J	-7013866.52	-7013866.30	-7013866.06	0.0076	0.0034
Moon	-23916-01-30 07:40 J	-7013866.39	-7013866.18	-7013865.92	0.0076	0.0032 *
Mercury	-23912-12-21 20:38 J	-7012079.69	-7012079.64	-7012079.57	0.0074	0.0067
Mercury	-23911-03-19 22:04 J	-7011991.66	-7011991.58	-7011991.48	0.0074	0.0059
Mercury	-23911-06-15 23:31 J	-7011903.62	-7011903.52	-7011903.40	0.0074	0.0051
Mercury	-23911-09-12 00:57 J	-7011815.58	-7011815.46	-7011815.33	0.0073	0.0043
Mercury	-23911-12-09 02:09 J	-7011727.54	-7011727.41	-7011727.27	0.0073	0.0035
Mercury	-23910-03-07 03:21 J	-7011639.49	-7011639.36	-7011639.20	0.0073	0.0027
Mercury	-23910-06-03 04:47 J	-7011551.44	-7011551.30	-7011551.14	0.0073	0.0019
Mercury	-23910-08-30 06:14 J	-7011463.39	-7011463.24	-7011463.09	0.0073	0.0011
Mercury	-23910-11-26 07:26 J	-7011375.34	-7011375.19	-7011375.03	0.0073	0.0004
Mercury	-23909-02-22 08:52 J	-7011287.28	-7011287.13	-7011286.98	0.0073	0.0004



Mercury	-23909-05-20 10:04 J	-7011199.23	-7011199.08	-7011198.93	0.0073	0.0012
Mercury	-23909-08-16 11:16 J	-7011111.17	-7011111.03	-7011110.88	0.0072	0.0019
Mercury	-23909-11-12 12:14 J	-7011023.12	-7011022.99	-7011022.83	0.0072	0.0028
Mercury	-23908-02-08 13:40 J	-7010935.06	-7010934.93	-7010934.79	0.0072	0.0034
Mercury	-23908-05-07 14:52 J	-7010847.00	-7010846.88	-7010846.75	0.0072	0.0042
Mercury	-23908-08-03 15:50 J	-7010758.94	-7010758.84	-7010758.71	0.0072	0.0049
Mercury	-23908-10-30 17:02 J	-7010670.87	-7010670.79	-7010670.68	0.0072	0.0056
Mercury	-23907-01-26 18:14 J	-7010582.80	-7010582.74	-7010582.65	0.0072	0.0063
Mercury	-23907-04-24 19:40 J	-7010494.71	-7010494.68	-7010494.65	0.0072	0.0070
Venus	-23766-05-19 07:26 J	-6958970.34	-6958970.19	-6958969.98	0.0064	0.0037
Venus	-23766-12-30 11:45 J	-6958745.23	-6958745.01	-6958744.79	0.0064	0.0001
Venus	-23765-08-11 15:07 J	-6958520.03	-6958519.87	-6958519.68	0.0065	0.0039
Moon	-23757-07-27 11:59 J	-6955613.21	-6955613.00	-6955612.74	0.0068	0.0034
Earth	-23757-07-27 12:57 J	-6955613.15	-6955612.96	-6955612.71	0.0068	0.0036 *
Earth	-23756-07-29 04:33 J	-6955246.36	-6955246.31	-6955246.19	0.0068	0.0065
Moon	-23756-07-29 07:55 J	-6955246.25	-6955246.17	-6955246.07	0.0068	0.0064 *
Mercury	-23751-12-13 01:11 J	-6953283.47	-6953283.45	-6953283.40	0.0071	0.0069
Mercury	-23750-03-11 02:23 J	-6953195.45	-6953195.40	-6953195.30	0.0071	0.0062
Mercury	-23750-06-07 04:19 J	-6953107.42	-6953107.32	-6953107.22	0.0071	0.0054
Mercury	-23750-09-03 05:16 J	-6953019.38	-6953019.28	-6953019.14	0.0071	0.0048
Mercury	-23750-11-30 06:57 J	-6952931.34	-6952931.21	-6952931.07	0.0071	0.0040
Mercury	-23749-02-26 08:09 J	-6952843.29	-6952843.16	-6952843.00	0.0071	0.0033
Mercury	-23749-05-24 09:50 J	-6952755.24	-6952755.09	-6952754.94	0.0071	0.0025
Mercury	-23749-08-20 11:02 J	-6952667.19	-6952667.04	-6952666.87	0.0072	0.0018
Mercury	-23749-11-16 12:28 J	-6952579.13	-6952578.98	-6952578.81	0.0072	0.0010
Mercury	-23748-02-12 14:09 J	-6952491.07	-6952490.91	-6952490.75	0.0072	0.0002
Mercury	-23748-05-11 15:35 J	-6952403.01	-6952402.85	-6952402.69	0.0072	0.0006
Mercury	-23748-08-07 17:02 J	-6952314.95	-6952314.79	-6952314.63	0.0072	0.0014
Mercury	-23748-11-03 18:28 J	-6952226.88	-6952226.73	-6952226.57	0.0072	0.0022
Mercury	-23747-01-30 19:40 J	-6952138.81	-6952138.68	-6952138.52	0.0072	0.0031

Mercury	-23747-04-28 21:21 J	-6952050.74	-6952050.61	-6952050.46	0.0072	0.0038
Mercury	-23747-07-25 22:47 J	-6951962.66	-6951962.55	-6951962.41	0.0073	0.0047
Mercury	-23747-10-22 00:14 J	-6951874.58	-6951874.49	-6951874.37	0.0073	0.0055
Mercury	-23746-01-18 01:55 J	-6951786.49	-6951786.42	-6951786.33	0.0073	0.0063
Mercury	-23746-04-16 03:07 J	-6951698.37	-6951698.37	-6951698.32	0.0073	0.0072
Venus	-23678-08-30 17:02 J	-6926724.87	-6926724.79	-6926724.69	0.0080	0.0073
Venus	-23677-04-12 04:19 J	-6926499.54	-6926499.32	-6926499.09	0.0080	0.0004
Venus	-23677-11-23 14:52 J	-6926273.91	-6926273.88	-6926273.79	0.0080	0.0077
Earth	-23670-02-01 13:26 J	-6924013.07	-6924012.94	-6924012.76	0.0076	0.0061
Moon	-23670-02-01 14:38 J	-6924013.03	-6924012.89	-6924012.68	0.0076	0.0058 *
Mercury	-23666-11-17 12:14 J	-6922263.05	-6922262.99	-6922262.92	0.0074	0.0067
Mercury	-23665-02-13 13:40 J	-6922175.02	-6922174.93	-6922174.84	0.0074	0.0059
Mercury	-23665-05-11 14:52 J	-6922086.98	-6922086.88	-6922086.76	0.0074	0.0051
Mercury	-23665-08-07 16:19 J	-6921998.94	-6921998.82	-6921998.69	0.0073	0.0043
Mercury	-23665-11-03 17:45 J	-6921910.90	-6921910.76	-6921910.62	0.0073	0.0035
Mercury	-23664-01-30 18:43 J	-6921822.85	-6921822.72	-6921822.56	0.0073	0.0028
Mercury	-23664-04-28 20:09 J	-6921734.80	-6921734.66	-6921734.50	0.0073	0.0019
Mercury	-23664-07-25 21:35 J	-6921646.75	-6921646.60	-6921646.45	0.0073	0.0011
Mercury	-23664-10-21 22:47 J	-6921558.70	-6921558.55	-6921558.39	0.0073	0.0004
Mercury	-23663-01-18 00:14 J	-6921470.64	-6921470.49	-6921470.34	0.0073	0.0004
Mercury	-23663-04-16 01:26 J	-6921382.59	-6921382.44	-6921382.29	0.0073	0.0012
Mercury	-23663-07-13 02:38 J	-6921294.53	-6921294.39	-6921294.24	0.0072	0.0019
Mercury	-23663-10-09 03:35 J	-6921206.48	-6921206.35	-6921206.19	0.0072	0.0028
Mercury	-23662-01-05 05:02 J	-6921118.42	-6921118.29	-6921118.15	0.0072	0.0034
Mercury	-23662-04-03 06:14 J	-6921030.36	-6921030.24	-6921030.11	0.0072	0.0042
Mercury	-23662-06-30 07:11 J	-6920942.29	-6920942.20	-6920942.07	0.0072	0.0049
Mercury	-23662-09-26 08:23 J	-6920854.23	-6920854.15	-6920854.04	0.0072	0.0056
Mercury	-23662-12-23 09:50 J	-6920766.16	-6920766.09	-6920766.01	0.0072	0.0063
Mercury	-23661-03-20 11:02 J	-6920678.06	-6920678.04	-6920678.01	0.0072	0.0070
Venus	-23521-11-03 17:16 J	-6869314.88	-6869314.78	-6869314.63	0.0064	0.0052

Venus	-23520-06-16 21:21 J	-6869089.81	-6869089.61	-6869089.39	0.0064	0.0016
Venus	-23519-01-28 00:57 J	-6868864.65	-6868864.46	-6868864.25	0.0065	0.0022
Venus	-23519-09-10 05:02 J	-6868639.38	-6868639.29	-6868639.21	0.0065	0.0059
Mars	-23516-01-15 21:21 J	-6867780.90	-6867780.61	-6867780.31	0.0066	0.0025
Moon	-23511-07-29 19:11 J	-6865759.94	-6865759.70	-6865759.44	0.0068	0.0009
Earth	-23511-07-29 22:47 J	-6865759.80	-6865759.55	-6865759.29	0.0068	0.0010 *
Mercury	-23505-11-07 17:16 J	-6863466.82	-6863466.78	-6863466.73	0.0071	0.0067
Mercury	-23504-02-03 18:28 J	-6863378.80	-6863378.73	-6863378.63	0.0071	0.0060
Mercury	-23504-05-02 20:09 J	-6863290.77	-6863290.66	-6863290.55	0.0071	0.0053
Mercury	-23504-07-29 21:07 J	-6863202.73	-6863202.62	-6863202.48	0.0071	0.0046
Mercury	-23504-10-25 22:47 J	-6863114.68	-6863114.55	-6863114.41	0.0071	0.0038
Mercury	-23503-01-21 23:59 J	-6863026.63	-6863026.50	-6863026.34	0.0071	0.0031
Mercury	-23503-04-20 01:40 J	-6862938.58	-6862938.43	-6862938.28	0.0072	0.0023
Mercury	-23503-07-17 03:07 J	-6862850.53	-6862850.37	-6862850.21	0.0072	0.0015
Mercury	-23503-10-13 04:33 J	-6862762.47	-6862762.31	-6862762.15	0.0072	0.0007
Mercury	-23502-01-09 05:59 J	-6862674.41	-6862674.25	-6862674.09	0.0072	0.0001
Mercury	-23502-04-07 07:26 J	-6862586.35	-6862586.19	-6862586.03	0.0072	0.0008
Mercury	-23502-07-04 08:52 J	-6862498.29	-6862498.13	-6862497.97	0.0072	0.0016
Mercury	-23502-09-30 10:19 J	-6862410.22	-6862410.07	-6862409.91	0.0072	0.0024
Mercury	-23502-12-27 11:45 J	-6862322.15	-6862322.01	-6862321.86	0.0072	0.0033
Mercury	-23501-03-24 13:11 J	-6862234.07	-6862233.95	-6862233.80	0.0073	0.0041
Mercury	-23501-06-20 14:52 J	-6862146.00	-6862145.88	-6862145.75	0.0073	0.0049
Mercury	-23501-09-16 16:33 J	-6862057.91	-6862057.81	-6862057.71	0.0073	0.0057
Mercury	-23501-12-13 17:45 J	-6861969.81	-6861969.76	-6861969.68	0.0073	0.0066
Venus	-23432-09-28 10:19 J	-6836844.26	-6836844.07	-6836843.84	0.0080	0.0030
Venus	-23431-05-11 21:35 J	-6836618.78	-6836618.60	-6836618.41	0.0080	0.0045
Mars	-23429-05-31 05:02 J	-6835868.59	-6835868.29	-6835867.96	0.0079	0.0010
Earth	-23425-02-02 00:57 J	-6834526.65	-6834526.46	-6834526.22	0.0077	0.0044
Moon	-23425-02-02 04:04 J	-6834526.53	-6834526.33	-6834526.10	0.0077	0.0040 *
Mercury	-23420-07-17 02:52 J	-6832534.39	-6832534.38	-6832534.35	0.0074	0.0073

Mercury	-23420-10-13 04:04 J	-6832446.39	-6832446.33	-6832446.24	0.0074	0.0065
Mercury	-23419-01-09 05:31 J	-6832358.36	-6832358.27	-6832358.16	0.0074	0.0057
Mercury	-23419-04-07 06:57 J	-6832270.32	-6832270.21	-6832270.08	0.0073	0.0048
Mercury	-23419-07-04 08:09 J	-6832182.27	-6832182.16	-6832182.02	0.0073	0.0041
Mercury	-23419-09-30 09:35 J	-6832094.23	-6832094.10	-6832093.95	0.0073	0.0032
Mercury	-23419-12-27 11:02 J	-6832006.18	-6832006.04	-6832005.89	0.0073	0.0024
Mercury	-23418-03-25 12:28 J	-6831918.13	-6831917.98	-6831917.83	0.0073	0.0016
Mercury	-23418-06-21 13:40 J	-6831830.08	-6831829.93	-6831829.77	0.0073	0.0009
Mercury	-23418-09-17 14:52 J	-6831742.03	-6831741.88	-6831741.72	0.0073	0.0002
Mercury	-23418-12-14 16:19 J	-6831653.98	-6831653.82	-6831653.67	0.0073	0.0007
Mercury	-23417-03-11 17:31 J	-6831565.92	-6831565.77	-6831565.62	0.0072	0.0014
Mercury	-23417-06-07 18:28 J	-6831477.86	-6831477.73	-6831477.57	0.0072	0.0023
Mercury	-23417-09-03 19:55 J	-6831389.81	-6831389.67	-6831389.53	0.0072	0.0029
Mercury	-23417-11-30 20:52 J	-6831301.75	-6831301.63	-6831301.49	0.0072	0.0037
Mercury	-23416-02-26 22:04 J	-6831213.69	-6831213.58	-6831213.45	0.0072	0.0044
Mercury	-23416-05-25 23:31 J	-6831125.62	-6831125.52	-6831125.41	0.0072	0.0051
Mercury	-23416-08-22 00:28 J	-6831037.55	-6831037.48	-6831037.38	0.0072	0.0059
Mercury	-23416-11-18 01:40 J	-6830949.48	-6830949.43	-6830949.36	0.0072	0.0066
Venus	-23275-12-03 05:59 J	-6779434.42	-6779434.25	-6779434.06	0.0064	0.0036
Venus	-23274-07-16 09:50 J	-6779209.31	-6779209.09	-6779208.87	0.0064	0.0001
Venus	-23273-02-26 12:57 J	-6778984.11	-6778983.96	-6778983.76	0.0065	0.0039
Mars	-23270-06-09 15:07 J	-6777785.11	-6777784.87	-6777784.62	0.0066	0.0041
Earth	-23265-07-31 05:16 J	-6775906.52	-6775906.28	-6775906.01	0.0068	0.0010
Moon	-23265-07-31 06:57 J	-6775906.45	-6775906.21	-6775905.95	0.0068	0.0009 *
Mercury	-23259-10-04 08:09 J	-6773650.18	-6773650.16	-6773650.09	0.0071	0.0068
Mercury	-23259-12-31 09:50 J	-6773562.16	-6773562.09	-6773562.00	0.0071	0.0060
Mercury	-23258-03-29 11:02 J	-6773474.13	-6773474.04	-6773473.92	0.0071	0.0053
Mercury	-23258-06-25 12:43 J	-6773386.09	-6773385.97	-6773385.85	0.0071	0.0046
Mercury	-23258-09-21 13:40 J	-6773298.05	-6773297.93	-6773297.78	0.0071	0.0039
Mercury	-23258-12-18 15:21 J	-6773210.00	-6773209.86	-6773209.71	0.0071	0.0031

Mercury	-23257-03-15 16:47 J	-6773121.95	-6773121.80	-6773121.64	0.0072	0.0023
Mercury	-23257-06-11 17:59 J	-6773033.90	-6773033.75	-6773033.58	0.0072	0.0016
Mercury	-23257-09-07 19:40 J	-6772945.84	-6772945.68	-6772945.52	0.0072	0.0007
Mercury	-23257-12-04 21:07 J	-6772857.78	-6772857.62	-6772857.46	0.0072	0.0001
Mercury	-23256-03-02 22:33 J	-6772769.72	-6772769.56	-6772769.40	0.0072	0.0008
Mercury	-23256-05-29 23:59 J	-6772681.66	-6772681.50	-6772681.34	0.0072	0.0016
Mercury	-23256-08-26 01:26 J	-6772593.59	-6772593.44	-6772593.28	0.0072	0.0024
Mercury	-23256-11-22 02:52 J	-6772505.52	-6772505.38	-6772505.23	0.0072	0.0033
Mercury	-23255-02-18 04:19 J	-6772417.45	-6772417.32	-6772417.18	0.0073	0.0041
Mercury	-23255-05-17 05:59 J	-6772329.37	-6772329.25	-6772329.13	0.0073	0.0049
Mercury	-23255-08-13 07:40 J	-6772241.28	-6772241.18	-6772241.08	0.0073	0.0057
Mercury	-23255-11-09 08:38 J	-6772153.19	-6772153.14	-6772153.05	0.0073	0.0066
Venus	-23186-03-16 12:43 J	-6747189.03	-6747188.97	-6747188.86	0.0080	0.0075
Venus	-23186-10-28 00:43 J	-6746963.70	-6746963.47	-6746963.24	0.0080	0.0001
Venus	-23185-06-09 11:02 J	-6746738.09	-6746738.04	-6746737.93	0.0080	0.0075
Earth	-23179-02-03 09:07 J	-6744673.37	-6744673.12	-6744672.86	0.0077	0.0019
Moon	-23179-02-03 10:47 J	-6744673.31	-6744673.05	-6744672.79	0.0077	0.0015 *
Mercury	-23174-09-08 19:26 J	-6742629.75	-6742629.69	-6742629.62	0.0074	0.0066
Mercury	-23174-12-05 20:38 J	-6742541.72	-6742541.64	-6742541.53	0.0074	0.0058
Mercury	-23173-03-02 22:04 J	-6742453.68	-6742453.58	-6742453.46	0.0073	0.0050
Mercury	-23173-05-29 23:31 J	-6742365.64	-6742365.52	-6742365.39	0.0073	0.0041
Mercury	-23173-08-26 00:43 J	-6742277.60	-6742277.47	-6742277.32	0.0073	0.0034
Mercury	-23173-11-22 02:09 J	-6742189.55	-6742189.41	-6742189.26	0.0073	0.0025
Mercury	-23172-02-18 03:35 J	-6742101.50	-6742101.35	-6742101.20	0.0073	0.0017
Mercury	-23172-05-17 04:47 J	-6742013.45	-6742013.30	-6742013.14	0.0073	0.0010
Mercury	-23172-08-13 06:14 J	-6741925.40	-6741925.24	-6741925.09	0.0073	0.0002
Mercury	-23172-11-09 07:26 J	-6741837.34	-6741837.19	-6741837.04	0.0073	0.0006
Mercury	-23171-02-05 08:38 J	-6741749.29	-6741749.14	-6741748.99	0.0072	0.0014
Mercury	-23171-05-04 09:50 J	-6741661.23	-6741661.09	-6741660.94	0.0072	0.0021
Mercury	-23171-07-31 10:47 J	-6741573.17	-6741573.05	-6741572.89	0.0072	0.0029

Mercury	-23171-10-27 12:14 J	-6741485.12	-6741484.99	-6741484.85	0.0072	0.0036
Mercury	-23170-01-23 13:40 J	-6741397.05	-6741396.93	-6741396.81	0.0072	0.0043
Mercury	-23170-04-21 14:23 J	-6741308.99	-6741308.90	-6741308.78	0.0072	0.0051
Mercury	-23170-07-18 15:35 J	-6741220.92	-6741220.85	-6741220.75	0.0072	0.0058
Mercury	-23170-10-14 17:02 J	-6741132.85	-6741132.79	-6741132.72	0.0072	0.0065
Venus	-23029-05-20 13:55 J	-6689779.00	-6689778.92	-6689778.80	0.0064	0.0057
Venus	-23029-12-31 18:00 J	-6689553.95	-6689553.75	-6689553.54	0.0064	0.0021
Venus	-23028-08-13 21:36 J	-6689328.80	-6689328.60	-6689328.38	0.0065	0.0016
Venus	-23027-03-27 00:57 J	-6689103.55	-6689103.46	-6689103.31	0.0065	0.0054
Earth	-23019-08-02 11:02 J	-6686053.26	-6686053.04	-6686052.78	0.0068	0.0027
Moon	-23019-08-02 14:23 J	-6686053.14	-6686052.90	-6686052.65	0.0068	0.0026 *
Mercury	-23013-08-29 23:45 J	-6683833.55	-6683833.51	-6683833.47	0.0071	0.0068
Mercury	-23013-11-26 00:43 J	-6683745.53	-6683745.47	-6683745.37	0.0071	0.0061
Mercury	-23012-02-22 01:55 J	-6683657.50	-6683657.42	-6683657.29	0.0071	0.0055
Mercury	-23012-05-21 03:36 J	-6683569.46	-6683569.35	-6683569.22	0.0071	0.0046
Mercury	-23012-08-17 05:16 J	-6683481.42	-6683481.28	-6683481.15	0.0071	0.0039
Mercury	-23012-11-13 06:14 J	-6683393.37	-6683393.24	-6683393.08	0.0072	0.0032
Mercury	-23011-02-09 07:55 J	-6683305.32	-6683305.17	-6683305.01	0.0072	0.0024
Mercury	-23011-05-08 09:21 J	-6683217.27	-6683217.11	-6683216.95	0.0072	0.0016
Mercury	-23011-08-04 10:48 J	-6683129.21	-6683129.05	-6683128.89	0.0072	0.0008
Mercury	-23011-10-31 12:14 J	-6683041.15	-6683040.99	-6683040.83	0.0072	0.0001
Mercury	-23010-01-27 13:40 J	-6682953.09	-6682952.93	-6682952.77	0.0072	0.0008
Mercury	-23010-04-25 15:07 J	-6682865.03	-6682864.87	-6682864.71	0.0072	0.0016
Mercury	-23010-07-22 16:19 J	-6682776.96	-6682776.82	-6682776.65	0.0072	0.0025
Mercury	-23010-10-18 17:45 J	-6682688.89	-6682688.76	-6682688.60	0.0072	0.0033
Mercury	-23009-01-14 19:26 J	-6682600.82	-6682600.69	-6682600.54	0.0073	0.0040
Mercury	-23009-04-11 20:52 J	-6682512.74	-6682512.63	-6682512.50	0.0073	0.0049
Mercury	-23009-07-08 22:33 J	-6682424.65	-6682424.56	-6682424.45	0.0073	0.0057
Mercury	-23009-10-05 00:14 J	-6682336.56	-6682336.49	-6682336.42	0.0073	0.0065

# 23RD MILLENNIUM BCE

This is a list of transits visible from Pluto in the 23rd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-22940-04-14 03:36 J		-6657308.54	-6657308.35	-6657308.15	0.0080	0.0041	
Venus	-22940-11-25 14:38 J		-6657083.08	-6657082.89	-6657082.67	0.0080	0.0034	
Moon	-22933-02-05 14:38 J		-6654820.14	-6654819.89	-6654819.62	0.0077	0.0014	
Earth	-22933-02-05 18:14 J		-6654819.99	-6654819.74	-6654819.48	0.0077	0.0010	*
Mercury	-22928-08-04 10:33 J		-6652813.11	-6652813.06	-6652812.98	0.0074	0.0066	
Mercury	-22928-10-31 12:00 J		-6652725.08	-6652725.00	-6652724.89	0.0073	0.0058	
Mercury	-22927-01-27 13:26 J		-6652637.04	-6652636.94	-6652636.82	0.0073	0.0049	
Mercury	-22927-04-25 14:52 J		-6652549.00	-6652548.88	-6652548.75	0.0073	0.0041	
Mercury	-22927-07-22 16:04 J		-6652460.96	-6652460.83	-6652460.68	0.0073	0.0033	
Mercury	-22927-10-18 17:31 J		-6652372.91	-6652372.77	-6652372.62	0.0073	0.0025	
Mercury	-22926-01-14 18:57 J		-6652284.86	-6652284.71	-6652284.56	0.0073	0.0017	
Mercury	-22926-04-12 20:09 J		-6652196.81	-6652196.66	-6652196.50	0.0073	0.0010	
Mercury	-22926-07-09 21:36 J		-6652108.76	-6652108.60	-6652108.45	0.0073	0.0002	
Mercury	-22926-10-05 22:48 J		-6652020.70	-6652020.55	-6652020.39	0.0072	0.0006	
Mercury	-22925-01-02 00:00 J		-6651932.65	-6651932.50	-6651932.34	0.0072	0.0014	
Mercury	-22925-03-30 01:11 J		-6651844.59	-6651844.45	-6651844.30	0.0072	0.0021	
Mercury	-22925-06-26 02:23 J		-6651756.53	-6651756.40	-6651756.25	0.0072	0.0029	
Mercury	-22925-09-22 03:36 J		-6651668.47	-6651668.35	-6651668.21	0.0072	0.0036	
Mercury	-22925-12-19 04:48 J		-6651580.41	-6651580.30	-6651580.17	0.0072	0.0044	

Mercury	-22924-03-17 06:00 J	-6651492.35	-6651492.25	-6651492.13	0.0072	0.0051
Mercury	-22924-06-13 07:11 J	-6651404.28	-6651404.20	-6651404.10	0.0072	0.0058
Mercury	-22924-09-09 08:38 J	-6651316.20	-6651316.14	-6651316.08	0.0072	0.0065
Venus	-22783-06-18 23:45 J	-6599898.63	-6599898.51	-6599898.35	0.0064	0.0049
Venus	-22782-01-30 03:50 J	-6599673.55	-6599673.34	-6599673.13	0.0064	0.0012
Venus	-22782-09-12 07:26 J	-6599448.38	-6599448.19	-6599447.98	0.0065	0.0025
Venus	-22781-04-24 10:48 J	-6599223.08	-6599223.05	-6599222.96	0.0065	0.0063
Earth	-22774-08-02 22:04 J	-6596566.62	-6596566.58	-6596566.51	0.0068	0.0066
Moon	-22774-08-02 23:02 J	-6596566.59	-6596566.54	-6596566.44	0.0068	0.0065 *
Moon	-22773-08-03 11:16 J	-6596200.26	-6596200.03	-6596199.79	0.0068	0.0032
Earth	-22773-08-03 13:55 J	-6596200.15	-6596199.92	-6596199.70	0.0068	0.0034 *
Mercury	-22767-10-22 15:07 J	-6593928.93	-6593928.87	-6593928.81	0.0071	0.0065
Mercury	-22766-01-18 16:19 J	-6593840.90	-6593840.82	-6593840.72	0.0071	0.0058
Mercury	-22766-04-16 17:31 J	-6593752.87	-6593752.77	-6593752.64	0.0071	0.0051
Mercury	-22766-07-13 18:57 J	-6593664.83	-6593664.71	-6593664.57	0.0071	0.0044
Mercury	-22766-10-09 20:38 J	-6593576.78	-6593576.64	-6593576.50	0.0071	0.0036
Mercury	-22765-01-05 21:50 J	-6593488.73	-6593488.59	-6593488.43	0.0072	0.0028
Mercury	-22765-04-02 23:16 J	-6593400.68	-6593400.53	-6593400.37	0.0072	0.0021
Mercury	-22765-06-30 00:43 J	-6593312.62	-6593312.47	-6593312.31	0.0072	0.0013
Mercury	-22765-09-26 02:09 J	-6593224.57	-6593224.41	-6593224.24	0.0072	0.0005
Mercury	-22765-12-23 03:36 J	-6593136.51	-6593136.35	-6593136.18	0.0072	0.0004
Mercury	-22764-03-21 05:02 J	-6593048.44	-6593048.29	-6593048.12	0.0072	0.0011
Mercury	-22764-06-17 06:28 J	-6592960.38	-6592960.23	-6592960.07	0.0072	0.0019
Mercury	-22764-09-13 07:55 J	-6592872.31	-6592872.17	-6592872.01	0.0072	0.0027
Mercury	-22764-12-10 09:21 J	-6592784.24	-6592784.11	-6592783.96	0.0073	0.0036
Mercury	-22763-03-08 11:02 J	-6592696.17	-6592696.04	-6592695.91	0.0073	0.0044
Mercury	-22763-06-04 12:28 J	-6592608.09	-6592607.98	-6592607.86	0.0073	0.0052
Mercury	-22763-08-31 13:40 J	-6592520.00	-6592519.93	-6592519.82	0.0073	0.0061
Mercury	-22763-11-27 15:21 J	-6592431.89	-6592431.86	-6592431.80	0.0073	0.0069
Venus	-22694-05-13 13:26 J	-6567428.14	-6567427.94	-6567427.71	0.0080	0.0028



Venus	-22694-12-25 00:28 J	-6567202.64	-6567202.48	-6567202.28	0.0080	0.0047
Moon	-22687-02-06 19:55 J	-6564966.91	-6564966.67	-6564966.42	0.0076	0.0019
Earth	-22687-02-06 20:23 J	-6564966.89	-6564966.65	-6564966.39	0.0076	0.0016 *
Mercury	-22682-07-01 00:43 J	-6562996.50	-6562996.47	-6562996.42	0.0074	0.0071
Mercury	-22682-09-27 01:55 J	-6562908.48	-6562908.42	-6562908.33	0.0074	0.0063
Mercury	-22682-12-24 03:21 J	-6562820.45	-6562820.36	-6562820.24	0.0073	0.0055
Mercury	-22681-03-21 04:48 J	-6562732.41	-6562732.30	-6562732.17	0.0073	0.0046
Mercury	-22681-06-17 06:00 J	-6562644.37	-6562644.25	-6562644.10	0.0073	0.0038
Mercury	-22681-09-13 07:26 J	-6562556.32	-6562556.19	-6562556.04	0.0073	0.0030
Mercury	-22681-12-10 08:52 J	-6562468.27	-6562468.13	-6562467.98	0.0073	0.0022
Mercury	-22680-03-08 10:19 J	-6562380.22	-6562380.07	-6562379.92	0.0073	0.0014
Mercury	-22680-06-04 11:31 J	-6562292.17	-6562292.02	-6562291.86	0.0073	0.0006
Mercury	-22680-08-31 12:43 J	-6562204.12	-6562203.97	-6562203.81	0.0073	0.0003
Mercury	-22680-11-27 13:55 J	-6562116.07	-6562115.92	-6562115.76	0.0072	0.0010
Mercury	-22679-02-23 15:21 J	-6562028.01	-6562027.86	-6562027.71	0.0072	0.0017
Mercury	-22679-05-22 16:33 J	-6561939.95	-6561939.81	-6561939.66	0.0072	0.0024
Mercury	-22679-08-18 17:31 J	-6561851.89	-6561851.77	-6561851.62	0.0072	0.0032
Mercury	-22679-11-14 18:57 J	-6561763.83	-6561763.71	-6561763.58	0.0072	0.0039
Mercury	-22678-02-10 19:55 J	-6561675.77	-6561675.67	-6561675.54	0.0072	0.0047
Mercury	-22678-05-09 21:07 J	-6561587.71	-6561587.62	-6561587.51	0.0072	0.0054
Mercury	-22678-08-05 22:33 J	-6561499.64	-6561499.56	-6561499.48	0.0072	0.0061
Mercury	-22678-11-01 23:16 J	-6561411.55	-6561411.53	-6561411.46	0.0071	0.0069
Venus	-22537-07-17 08:23 J	-6510018.28	-6510018.15	-6510017.97	0.0064	0.0045
Venus	-22536-02-27 12:43 J	-6509793.19	-6509792.97	-6509792.76	0.0064	0.0008
Venus	-22536-10-10 16:19 J	-6509568.01	-6509567.82	-6509567.62	0.0065	0.0029
Mars	-22533-09-22 07:40 J	-6508490.36	-6508490.18	-6508489.93	0.0066	0.0049
Earth	-22528-08-03 21:50 J	-6506713.60	-6506713.59	-6506713.52	0.0068	0.0067
Moon	-22528-08-04 00:57 J	-6506713.52	-6506713.46	-6506713.35	0.0068	0.0064 *
Moon	-22527-08-05 11:31 J	-6506347.22	-6506347.02	-6506346.78	0.0068	0.0031
Earth	-22527-08-05 13:40 J	-6506347.15	-6506346.93	-6506346.70	0.0068	0.0033 *

Mercury	-22521-12-14 05:45 J	-6504024.32	-6504024.26	-6504024.19	0.0071	0.0064
Mercury	-22520-03-12 06:57 J	-6503936.29	-6503936.21	-6503936.10	0.0071	0.0057
Mercury	-22520-06-08 08:23 J	-6503848.26	-6503848.15	-6503848.03	0.0071	0.0050
Mercury	-22520-09-04 09:36 J	-6503760.21	-6503760.10	-6503759.96	0.0071	0.0042
Mercury	-22520-12-01 11:02 J	-6503672.17	-6503672.04	-6503671.89	0.0072	0.0035
Mercury	-22519-02-27 12:43 J	-6503584.12	-6503583.97	-6503583.82	0.0072	0.0027
Mercury	-22519-05-26 14:09 J	-6503496.07	-6503495.91	-6503495.76	0.0072	0.0019
Mercury	-22519-08-22 15:36 J	-6503408.01	-6503407.85	-6503407.69	0.0072	0.0011
Mercury	-22519-11-18 17:02 J	-6503319.95	-6503319.79	-6503319.63	0.0072	0.0004
Mercury	-22518-02-14 18:28 J	-6503231.89	-6503231.73	-6503231.57	0.0072	0.0005
Mercury	-22518-05-13 19:55 J	-6503143.83	-6503143.67	-6503143.51	0.0072	0.0013
Mercury	-22518-08-09 21:21 J	-6503055.77	-6503055.61	-6503055.45	0.0072	0.0021
Mercury	-22518-11-05 22:48 J	-6502967.70	-6502967.55	-6502967.40	0.0072	0.0029
Mercury	-22517-02-02 00:00 J	-6502879.63	-6502879.50	-6502879.35	0.0073	0.0038
Mercury	-22517-04-30 01:26 J	-6502791.55	-6502791.44	-6502791.30	0.0073	0.0046
Mercury	-22517-07-27 03:07 J	-6502703.47	-6502703.37	-6502703.25	0.0073	0.0054
Mercury	-22517-10-23 04:48 J	-6502615.38	-6502615.30	-6502615.21	0.0073	0.0062
Mercury	-22516-01-19 06:00 J	-6502527.27	-6502527.25	-6502527.19	0.0073	0.0071
Venus	-22448-06-10 22:33 J	-6477547.78	-6477547.56	-6477547.34	0.0080	0.0019
Venus	-22447-01-22 09:07 J	-6477322.26	-6477322.12	-6477321.94	0.0080	0.0055
Mars	-22445-02-05 18:43 J	-6476578.01	-6476577.72	-6476577.40	0.0079	0.0018
Earth	-22441-02-08 20:09 J	-6475113.90	-6475113.66	-6475113.39	0.0077	0.0017
Moon	-22441-02-09 00:14 J	-6475113.74	-6475113.49	-6475113.24	0.0077	0.0019 *
Mercury	-22436-08-22 15:36 J	-6473091.88	-6473091.85	-6473091.78	0.0074	0.0070
Mercury	-22436-11-18 17:16 J	-6473003.86	-6473003.78	-6473003.69	0.0073	0.0061
Mercury	-22435-02-14 18:28 J	-6472915.83	-6472915.73	-6472915.61	0.0073	0.0053
Mercury	-22435-05-13 19:55 J	-6472827.79	-6472827.67	-6472827.54	0.0073	0.0044
Mercury	-22435-08-09 21:07 J	-6472739.74	-6472739.62	-6472739.48	0.0073	0.0036
Mercury	-22435-11-05 22:33 J	-6472651.70	-6472651.56	-6472651.41	0.0073	0.0028
Mercury	-22434-02-02 00:00 J	-6472563.65	-6472563.50	-6472563.35	0.0073	0.0020

Mercury	-22434-05-01 01:11 J	-6472475.60	-6472475.45	-6472475.29	0.0073	0.0012
Mercury	-22434-07-28 02:38 J	-6472387.55	-6472387.39	-6472387.24	0.0073	0.0005
Mercury	-22434-10-24 03:50 J	-6472299.49	-6472299.34	-6472299.19	0.0072	0.0003
Mercury	-22433-01-20 05:02 J	-6472211.44	-6472211.29	-6472211.14	0.0072	0.0011
Mercury	-22433-04-17 06:14 J	-6472123.38	-6472123.24	-6472123.09	0.0072	0.0019
Mercury	-22433-07-14 07:26 J	-6472035.33	-6472035.19	-6472035.04	0.0072	0.0026
Mercury	-22433-10-10 08:38 J	-6471947.27	-6471947.14	-6471947.00	0.0072	0.0034
Mercury	-22432-01-06 09:50 J	-6471859.21	-6471859.09	-6471858.96	0.0072	0.0041
Mercury	-22432-04-04 10:48 J	-6471771.14	-6471771.05	-6471770.92	0.0072	0.0049
Mercury	-22432-07-01 12:14 J	-6471683.08	-6471682.99	-6471682.89	0.0072	0.0056
Mercury	-22432-09-27 13:26 J	-6471595.00	-6471594.94	-6471594.86	0.0071	0.0063
Mercury	-22432-12-24 14:52 J	-6471506.91	-6471506.88	-6471506.86	0.0071	0.0070
Venus	-22291-08-15 15:36 J	-6420137.97	-6420137.85	-6420137.67	0.0064	0.0046
Venus	-22290-03-28 19:55 J	-6419912.88	-6419912.67	-6419912.45	0.0064	0.0009
Venus	-22290-11-08 23:16 J	-6419687.71	-6419687.53	-6419687.32	0.0065	0.0029
Mars	-22286-02-13 07:40 J	-6418495.47	-6418495.18	-6418494.85	0.0066	0.0019
Earth	-22281-08-06 10:19 J	-6416494.31	-6416494.07	-6416493.82	0.0068	0.0024
Moon	-22281-08-06 13:26 J	-6416494.17	-6416493.94	-6416493.69	0.0068	0.0021 *
Mercury	-22274-02-05 19:40 J	-6414119.73	-6414119.68	-6414119.61	0.0071	0.0066
Mercury	-22274-05-04 20:52 J	-6414031.70	-6414031.63	-6414031.53	0.0071	0.0059
Mercury	-22274-07-31 22:19 J	-6413943.67	-6413943.57	-6413943.45	0.0071	0.0051
Mercury	-22274-10-27 23:45 J	-6413855.63	-6413855.51	-6413855.38	0.0071	0.0044
Mercury	-22273-01-24 00:57 J	-6413767.58	-6413767.46	-6413767.31	0.0071	0.0037
Mercury	-22273-04-21 02:23 J	-6413679.54	-6413679.40	-6413679.24	0.0072	0.0029
Mercury	-22273-07-18 04:04 J	-6413591.48	-6413591.33	-6413591.18	0.0072	0.0021
Mercury	-22273-10-14 05:31 J	-6413503.43	-6413503.27	-6413503.11	0.0072	0.0013
Mercury	-22272-01-10 06:57 J	-6413415.37	-6413415.21	-6413415.05	0.0072	0.0005
Mercury	-22272-04-08 08:23 J	-6413327.32	-6413327.15	-6413326.99	0.0072	0.0003
Mercury	-22272-07-05 09:36 J	-6413239.25	-6413239.10	-6413238.93	0.0072	0.0011
Mercury	-22272-10-01 11:02 J	-6413151.19	-6413151.04	-6413150.88	0.0072	0.0019

Mercury	-22272-12-28 12:28 J	-6413063.12	-6413062.98	-6413062.82	0.0072	0.0027
Mercury	-22271-03-26 13:55 J	-6412975.05	-6412974.92	-6412974.77	0.0073	0.0036
Mercury	-22271-06-22 15:21 J	-6412886.98	-6412886.86	-6412886.72	0.0073	0.0044
Mercury	-22271-09-18 17:02 J	-6412798.90	-6412798.79	-6412798.67	0.0073	0.0052
Mercury	-22271-12-15 18:14 J	-6412710.81	-6412710.74	-6412710.63	0.0073	0.0061
Mercury	-22270-03-13 19:55 J	-6412622.71	-6412622.67	-6412622.61	0.0073	0.0069
Venus	-22202-07-10 02:38 J	-6387667.60	-6387667.39	-6387667.18	0.0080	0.0029
Venus	-22201-02-20 13:26 J	-6387442.11	-6387441.94	-6387441.74	0.0080	0.0045
Mars	-22199-06-28 21:36 J	-6386582.88	-6386582.60	-6386582.28	0.0079	0.0024
Moon	-22195-02-09 13:40 J	-6385261.19	-6385260.93	-6385260.66	0.0077	0.0004
Earth	-22195-02-09 14:23 J	-6385261.15	-6385260.90	-6385260.63	0.0077	0.0006 *
Mercury	-22190-10-15 05:31 J	-6383187.28	-6383187.27	-6383187.25	0.0074	0.0073
Mercury	-22189-01-11 06:43 J	-6383099.28	-6383099.22	-6383099.14	0.0073	0.0065
Mercury	-22189-04-08 08:09 J	-6383011.25	-6383011.16	-6383011.05	0.0073	0.0056
Mercury	-22189-07-05 09:21 J	-6382923.21	-6382923.11	-6382922.98	0.0073	0.0048
Mercury	-22189-10-01 10:48 J	-6382835.17	-6382835.05	-6382834.91	0.0073	0.0040
Mercury	-22189-12-28 12:14 J	-6382747.12	-6382746.99	-6382746.84	0.0073	0.0032
Mercury	-22188-03-26 13:40 J	-6382659.07	-6382658.93	-6382658.78	0.0073	0.0024
Mercury	-22188-06-22 14:52 J	-6382571.02	-6382570.88	-6382570.72	0.0073	0.0016
Mercury	-22188-09-18 16:19 J	-6382482.97	-6382482.82	-6382482.66	0.0073	0.0008
Mercury	-22188-12-15 17:31 J	-6382394.92	-6382394.77	-6382394.61	0.0072	0.0002
Mercury	-22187-03-13 18:57 J	-6382306.87	-6382306.71	-6382306.56	0.0072	0.0008
Mercury	-22187-06-09 20:09 J	-6382218.81	-6382218.66	-6382218.51	0.0072	0.0015
Mercury	-22187-09-05 21:21 J	-6382130.75	-6382130.61	-6382130.46	0.0072	0.0023
Mercury	-22187-12-02 22:19 J	-6382042.70	-6382042.57	-6382042.42	0.0072	0.0031
Mercury	-22186-02-28 23:45 J	-6381954.64	-6381954.51	-6381954.38	0.0072	0.0038
Mercury	-22186-05-28 00:43 J	-6381866.57	-6381866.47	-6381866.34	0.0072	0.0046
Mercury	-22186-08-24 01:55 J	-6381778.51	-6381778.42	-6381778.30	0.0072	0.0053
Mercury	-22186-11-20 03:21 J	-6381690.44	-6381690.36	-6381690.28	0.0072	0.0060
Mercury	-22185-02-16 04:04 J	-6381602.36	-6381602.33	-6381602.26	0.0071	0.0068

Venus	-22045-09-12 21:50 J	-6330257.71	-6330257.59	-6330257.43	0.0064	0.0049
Venus	-22044-04-26 01:55 J	-6330032.63	-6330032.42	-6330032.20	0.0064	0.0013
Venus	-22044-12-07 05:31 J	-6329807.46	-6329807.27	-6329807.06	0.0065	0.0024
Venus	-22043-07-20 08:52 J	-6329582.17	-6329582.13	-6329582.03	0.0065	0.0061
Mars	-22040-07-06 05:45 J	-6328500.58	-6328500.26	-6328499.94	0.0066	0.0004
Moon	-22035-08-08 06:00 J	-6326641.52	-6326641.25	-6326640.98	0.0068	0.0007
Earth	-22035-08-08 05:31 J	-6326641.51	-6326641.27	-6326641.00	0.0068	0.0011 *
Mercury	-22028-03-30 09:21 J	-6324215.13	-6324215.11	-6324215.07	0.0071	0.0069
Mercury	-22028-06-26 10:33 J	-6324127.12	-6324127.06	-6324126.97	0.0071	0.0062
Mercury	-22028-09-22 12:00 J	-6324039.09	-6324039.00	-6324038.89	0.0071	0.0055
Mercury	-22028-12-19 13:11 J	-6323951.05	-6323950.95	-6323950.81	0.0071	0.0048
Mercury	-22027-03-17 14:38 J	-6323863.01	-6323862.89	-6323862.74	0.0071	0.0040
Mercury	-22027-06-13 16:19 J	-6323774.96	-6323774.82	-6323774.67	0.0072	0.0032
Mercury	-22027-09-09 17:45 J	-6323686.91	-6323686.76	-6323686.61	0.0072	0.0024
Mercury	-22027-12-06 19:11 J	-6323598.86	-6323598.70	-6323598.54	0.0072	0.0016
Mercury	-22026-03-04 20:38 J	-6323510.80	-6323510.64	-6323510.48	0.0072	0.0008
Mercury	-22026-05-31 22:04 J	-6323422.74	-6323422.58	-6323422.42	0.0072	0.0001
Mercury	-22026-08-27 23:16 J	-6323334.68	-6323334.53	-6323334.36	0.0072	0.0008
Mercury	-22026-11-24 00:43 J	-6323246.62	-6323246.47	-6323246.30	0.0072	0.0016
Mercury	-22025-02-20 02:09 J	-6323158.55	-6323158.41	-6323158.25	0.0072	0.0024
Mercury	-22025-05-18 03:36 J	-6323070.49	-6323070.35	-6323070.19	0.0073	0.0033
Mercury	-22025-08-14 05:02 J	-6322982.41	-6322982.29	-6322982.14	0.0073	0.0041
Mercury	-22025-11-10 06:43 J	-6322894.33	-6322894.22	-6322894.10	0.0073	0.0049
Mercury	-22024-02-06 07:55 J	-6322806.25	-6322806.17	-6322806.05	0.0073	0.0058
Mercury	-22024-05-05 09:36 J	-6322718.15	-6322718.10	-6322718.02	0.0073	0.0066

# 22ND MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 22nd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-21956-08-07 06:43 J		-6297787.41	-6297787.22	-6297787.02	0.0080	0.0038	
Venus	-21955-03-20 17:45 J		-6297561.95	-6297561.76	-6297561.55	0.0080	0.0035	
Mars	-21953-11-19 02:38 J		-6296587.52	-6296587.39	-6296587.17	0.0078	0.0066	
Moon	-21949-02-11 05:02 J		-6295408.51	-6295408.29	-6295408.03	0.0077	0.0027	
Earth	-21949-02-11 08:52 J		-6295408.37	-6295408.13	-6295407.88	0.0077	0.0026	*
Mercury	-21943-03-04 20:38 J		-6293194.70	-6293194.64	-6293194.58	0.0073	0.0068	
Mercury	-21943-05-31 21:50 J		-6293106.67	-6293106.59	-6293106.49	0.0073	0.0060	
Mercury	-21943-08-27 23:02 J		-6293018.64	-6293018.54	-6293018.42	0.0073	0.0052	
Mercury	-21943-11-24 00:28 J		-6292930.60	-6292930.48	-6292930.34	0.0073	0.0043	
Mercury	-21942-02-20 01:55 J		-6292842.55	-6292842.42	-6292842.28	0.0073	0.0035	
Mercury	-21942-05-19 03:07 J		-6292754.50	-6292754.37	-6292754.21	0.0073	0.0027	
Mercury	-21942-08-15 04:33 J		-6292666.45	-6292666.31	-6292666.15	0.0073	0.0019	
Mercury	-21942-11-11 06:00 J		-6292578.40	-6292578.25	-6292578.10	0.0073	0.0011	
Mercury	-21941-02-07 07:11 J		-6292490.35	-6292490.20	-6292490.04	0.0072	0.0003	
Mercury	-21941-05-05 08:38 J		-6292402.30	-6292402.14	-6292401.99	0.0072	0.0005	
Mercury	-21941-08-01 09:50 J		-6292314.24	-6292314.09	-6292313.94	0.0072	0.0012	
Mercury	-21941-10-28 11:02 J		-6292226.19	-6292226.04	-6292225.89	0.0072	0.0020	
Mercury	-21940-01-24 12:00 J		-6292138.13	-6292138.00	-6292137.84	0.0072	0.0028	
Mercury	-21940-04-22 13:26 J		-6292050.07	-6292049.94	-6292049.80	0.0072	0.0035	
Mercury	-21940-07-19 14:38 J		-6291962.01	-6291961.89	-6291961.76	0.0072	0.0043	
Mercury	-21940-10-15 15:50 J		-6291873.94	-6291873.84	-6291873.72	0.0072	0.0050	
Mercury	-21939-01-11 16:48 J		-6291785.87	-6291785.80	-6291785.69	0.0072	0.0058	

Mercury	-21939-04-09 18:14 J	-6291697.80	-6291697.74	-6291697.67	0.0071	0.0064
Venus	-21799-10-12 02:52 J	-6240377.45	-6240377.38	-6240377.25	0.0064	0.0057
Venus	-21798-05-25 06:57 J	-6240152.40	-6240152.21	-6240151.99	0.0064	0.0022
Venus	-21797-01-05 10:48 J	-6239927.25	-6239927.05	-6239926.83	0.0064	0.0016
Venus	-21797-08-17 14:38 J	-6239702.01	-6239701.89	-6239701.76	0.0065	0.0052
Mars	-21794-11-26 23:16 J	-6238505.82	-6238505.53	-6238505.20	0.0066	0.0020
Moon	-21789-08-08 19:55 J	-6236788.91	-6236788.67	-6236788.41	0.0068	0.0012
Earth	-21789-08-08 23:31 J	-6236788.78	-6236788.52	-6236788.26	0.0068	0.0009 *
Mercury	-21782-08-18 23:31 J	-6234222.55	-6234222.52	-6234222.45	0.0071	0.0067
Mercury	-21782-11-15 01:11 J	-6234134.53	-6234134.45	-6234134.36	0.0071	0.0059
Mercury	-21781-02-11 02:23 J	-6234046.50	-6234046.40	-6234046.28	0.0071	0.0052
Mercury	-21781-05-09 03:50 J	-6233958.45	-6233958.34	-6233958.21	0.0071	0.0045
Mercury	-21781-08-05 05:16 J	-6233870.41	-6233870.28	-6233870.14	0.0072	0.0037
Mercury	-21781-11-01 06:43 J	-6233782.36	-6233782.22	-6233782.07	0.0072	0.0029
Mercury	-21780-01-28 07:55 J	-6233694.31	-6233694.17	-6233694.00	0.0072	0.0022
Mercury	-21780-04-26 09:21 J	-6233606.26	-6233606.11	-6233605.94	0.0072	0.0014
Mercury	-21780-07-23 11:02 J	-6233518.20	-6233518.04	-6233517.88	0.0072	0.0005
Mercury	-21780-10-19 12:28 J	-6233430.14	-6233429.98	-6233429.82	0.0072	0.0003
Mercury	-21779-01-15 13:55 J	-6233342.08	-6233341.92	-6233341.76	0.0072	0.0011
Mercury	-21779-04-13 15:21 J	-6233254.02	-6233253.86	-6233253.70	0.0072	0.0019
Mercury	-21779-07-10 16:33 J	-6233165.95	-6233165.81	-6233165.65	0.0072	0.0027
Mercury	-21779-10-06 18:00 J	-6233077.88	-6233077.75	-6233077.60	0.0073	0.0036
Mercury	-21778-01-02 19:26 J	-6232989.81	-6232989.69	-6232989.55	0.0073	0.0044
Mercury	-21778-03-31 21:07 J	-6232901.73	-6232901.62	-6232901.50	0.0073	0.0052
Mercury	-21778-06-27 22:19 J	-6232813.64	-6232813.57	-6232813.46	0.0073	0.0061
Mercury	-21778-09-24 00:14 J	-6232725.53	-6232725.49	-6232725.44	0.0073	0.0069
Venus	-21710-09-05 07:40 J	-6207907.30	-6207907.18	-6207907.01	0.0080	0.0061
Venus	-21709-04-17 19:26 J	-6207681.91	-6207681.69	-6207681.47	0.0080	0.0013
Earth	-21703-02-11 22:04 J	-6205555.72	-6205555.58	-6205555.42	0.0077	0.0062
Moon	-21703-02-12 00:00 J	-6205555.62	-6205555.50	-6205555.34	0.0077	0.0064 *

Mercury	-21697-07-23 10:33 J	-6203202.11	-6203202.06	-6203201.99	0.0073	0.0067
Mercury	-21697-10-19 11:45 J	-6203114.09	-6203114.01	-6203113.90	0.0073	0.0059
Mercury	-21696-01-15 13:11 J	-6203026.05	-6203025.95	-6203025.82	0.0073	0.0050
Mercury	-21696-04-13 14:38 J	-6202938.01	-6202937.89	-6202937.75	0.0073	0.0042
Mercury	-21696-07-10 15:50 J	-6202849.96	-6202849.84	-6202849.69	0.0073	0.0034
Mercury	-21696-10-06 17:16 J	-6202761.91	-6202761.78	-6202761.62	0.0073	0.0026
Mercury	-21695-01-02 18:43 J	-6202673.86	-6202673.72	-6202673.56	0.0073	0.0018
Mercury	-21695-03-31 20:09 J	-6202585.81	-6202585.66	-6202585.51	0.0072	0.0009
Mercury	-21695-06-27 21:21 J	-6202497.76	-6202497.61	-6202497.45	0.0072	0.0002
Mercury	-21695-09-23 22:48 J	-6202409.71	-6202409.55	-6202409.40	0.0072	0.0006
Mercury	-21695-12-20 23:45 J	-6202321.65	-6202321.51	-6202321.35	0.0072	0.0015
Mercury	-21694-03-19 01:11 J	-6202233.59	-6202233.45	-6202233.30	0.0072	0.0021
Mercury	-21694-06-15 02:23 J	-6202145.54	-6202145.40	-6202145.26	0.0072	0.0029
Mercury	-21694-09-11 03:21 J	-6202057.48	-6202057.36	-6202057.21	0.0072	0.0037
Mercury	-21694-12-08 04:48 J	-6201969.41	-6201969.30	-6201969.17	0.0072	0.0044
Mercury	-21693-03-05 05:45 J	-6201881.35	-6201881.26	-6201881.14	0.0072	0.0052
Mercury	-21693-06-01 07:11 J	-6201793.28	-6201793.20	-6201793.11	0.0071	0.0059
Mercury	-21693-08-28 08:23 J	-6201705.20	-6201705.15	-6201705.09	0.0071	0.0066
Venus	-21552-06-22 10:33 J	-6150272.22	-6150272.06	-6150271.86	0.0064	0.0035
Venus	-21551-02-02 14:38 J	-6150047.11	-6150046.89	-6150046.67	0.0064	0.0001
Venus	-21551-09-15 18:14 J	-6149821.91	-6149821.74	-6149821.56	0.0065	0.0038
Mars	-21547-04-18 11:31 J	-6148511.30	-6148511.02	-6148510.70	0.0066	0.0023
Earth	-21543-08-10 13:26 J	-6146936.14	-6146935.94	-6146935.71	0.0068	0.0038
Moon	-21543-08-10 15:07 J	-6146936.05	-6146935.87	-6146935.64	0.0068	0.0040 *
Moon	-21542-08-12 01:55 J	-6146569.48	-6146569.42	-6146569.32	0.0068	0.0065
Earth	-21542-08-12 04:48 J	-6146569.37	-6146569.30	-6146569.18	0.0068	0.0064 *
Mercury	-21535-01-06 13:11 J	-6144229.98	-6144229.95	-6144229.88	0.0071	0.0068
Mercury	-21535-04-04 14:52 J	-6144141.96	-6144141.88	-6144141.79	0.0071	0.0060
Mercury	-21535-07-01 16:04 J	-6144053.93	-6144053.83	-6144053.71	0.0071	0.0052
Mercury	-21535-09-27 17:31 J	-6143965.89	-6143965.77	-6143965.64	0.0071	0.0045



Mercury	-21535-12-24 18:57 J	-6143877.84	-6143877.71	-6143877.57	0.0072	0.0037
Mercury	-21534-03-22 20:23 J	-6143789.79	-6143789.65	-6143789.50	0.0072	0.0029
Mercury	-21534-06-18 21:36 J	-6143701.74	-6143701.60	-6143701.44	0.0072	0.0022
Mercury	-21534-09-14 23:02 J	-6143613.69	-6143613.54	-6143613.37	0.0072	0.0014
Mercury	-21534-12-12 00:28 J	-6143525.63	-6143525.48	-6143525.31	0.0072	0.0007
Mercury	-21533-03-09 02:09 J	-6143437.57	-6143437.41	-6143437.25	0.0072	0.0003
Mercury	-21533-06-05 03:36 J	-6143349.51	-6143349.35	-6143349.19	0.0072	0.0011
Mercury	-21533-09-01 05:02 J	-6143261.45	-6143261.29	-6143261.14	0.0072	0.0019
Mercury	-21533-11-28 06:14 J	-6143173.38	-6143173.24	-6143173.08	0.0073	0.0027
Mercury	-21532-02-24 07:40 J	-6143085.31	-6143085.18	-6143085.03	0.0073	0.0036
Mercury	-21532-05-23 09:07 J	-6142997.23	-6142997.12	-6142996.98	0.0073	0.0044
Mercury	-21532-08-19 10:48 J	-6142909.16	-6142909.05	-6142908.93	0.0073	0.0052
Mercury	-21532-11-15 12:00 J	-6142821.07	-6142821.00	-6142820.89	0.0073	0.0061
Mercury	-21531-02-11 13:55 J	-6142732.96	-6142732.92	-6142732.87	0.0073	0.0070
Venus	-21463-05-16 19:55 J	-6117801.89	-6117801.67	-6117801.44	0.0080	0.0012
Venus	-21463-12-28 06:28 J	-6117576.35	-6117576.23	-6117576.06	0.0080	0.0061
Moon	-21456-02-14 11:31 J	-6115336.22	-6115336.02	-6115335.83	0.0076	0.0048
Earth	-21456-02-14 11:16 J	-6115336.22	-6115336.03	-6115335.80	0.0076	0.0045 *
Mercury	-21451-12-12 00:28 J	-6113209.53	-6113209.48	-6113209.40	0.0073	0.0066
Mercury	-21450-03-10 02:09 J	-6113121.50	-6113121.41	-6113121.31	0.0073	0.0058
Mercury	-21450-06-06 03:21 J	-6113033.47	-6113033.36	-6113033.24	0.0073	0.0049
Mercury	-21450-09-02 04:48 J	-6112945.42	-6112945.30	-6112945.17	0.0073	0.0041
Mercury	-21450-11-29 06:00 J	-6112857.38	-6112857.25	-6112857.10	0.0073	0.0033
Mercury	-21449-02-25 07:26 J	-6112769.33	-6112769.19	-6112769.04	0.0073	0.0025
Mercury	-21449-05-23 08:52 J	-6112681.28	-6112681.13	-6112680.98	0.0073	0.0017
Mercury	-21449-08-19 10:04 J	-6112593.23	-6112593.08	-6112592.92	0.0072	0.0009
Mercury	-21449-11-15 11:16 J	-6112505.18	-6112505.03	-6112504.87	0.0072	0.0003
Mercury	-21448-02-11 12:43 J	-6112417.13	-6112416.97	-6112416.82	0.0072	0.0007
Mercury	-21448-05-10 13:55 J	-6112329.07	-6112328.92	-6112328.77	0.0072	0.0015
Mercury	-21448-08-06 15:07 J	-6112241.01	-6112240.87	-6112240.72	0.0072	0.0022

Mercury	-21448-11-02 16:19 J	-6112152.96	-6112152.82	-6112152.67	0.0072	0.0030
Mercury	-21447-01-29 17:16 J	-6112064.89	-6112064.78	-6112064.63	0.0072	0.0038
Mercury	-21447-04-27 18:43 J	-6111976.83	-6111976.72	-6111976.59	0.0072	0.0045
Mercury	-21447-07-24 19:40 J	-6111888.77	-6111888.68	-6111888.56	0.0071	0.0053
Mercury	-21447-10-20 20:52 J	-6111800.70	-6111800.63	-6111800.53	0.0071	0.0060
Mercury	-21446-01-16 22:19 J	-6111712.61	-6111712.57	-6111712.51	0.0071	0.0067
Venus	-21306-07-21 12:57 J	-6060392.07	-6060391.96	-6060391.83	0.0064	0.0052
Venus	-21305-03-02 16:48 J	-6060167.01	-6060166.80	-6060166.59	0.0064	0.0017
Venus	-21305-10-13 20:23 J	-6059941.85	-6059941.65	-6059941.44	0.0064	0.0020
Venus	-21304-05-26 23:45 J	-6059716.58	-6059716.51	-6059716.37	0.0065	0.0057
Mars	-21301-09-07 17:45 J	-6058517.06	-6058516.76	-6058516.44	0.0066	0.0016
Moon	-21296-08-12 16:19 J	-6056717.05	-6056716.82	-6056716.59	0.0068	0.0026
Earth	-21296-08-12 16:33 J	-6056717.03	-6056716.81	-6056716.55	0.0068	0.0027 *
Mercury	-21289-05-27 02:23 J	-6054237.41	-6054237.40	-6054237.35	0.0071	0.0070
Mercury	-21289-08-23 03:50 J	-6054149.40	-6054149.34	-6054149.25	0.0071	0.0062
Mercury	-21289-11-19 05:16 J	-6054061.37	-6054061.28	-6054061.17	0.0071	0.0055
Mercury	-21288-02-15 06:28 J	-6053973.34	-6053973.23	-6053973.10	0.0071	0.0047
Mercury	-21288-05-14 07:55 J	-6053885.29	-6053885.17	-6053885.03	0.0072	0.0040
Mercury	-21288-08-10 09:21 J	-6053797.25	-6053797.11	-6053796.96	0.0072	0.0032
Mercury	-21288-11-06 10:48 J	-6053709.20	-6053709.05	-6053708.90	0.0072	0.0024
Mercury	-21287-02-02 12:14 J	-6053621.15	-6053620.99	-6053620.83	0.0072	0.0016
Mercury	-21287-05-01 13:40 J	-6053533.09	-6053532.93	-6053532.77	0.0072	0.0008
Mercury	-21287-07-28 15:07 J	-6053445.03	-6053444.87	-6053444.71	0.0072	0.0001
Mercury	-21287-10-24 16:19 J	-6053356.97	-6053356.82	-6053356.65	0.0072	0.0009
Mercury	-21286-01-20 17:45 J	-6053268.91	-6053268.76	-6053268.59	0.0072	0.0017
Mercury	-21286-04-18 19:11 J	-6053180.84	-6053180.70	-6053180.54	0.0072	0.0025
Mercury	-21286-07-15 20:38 J	-6053092.77	-6053092.64	-6053092.49	0.0073	0.0033
Mercury	-21286-10-11 22:19 J	-6053004.70	-6053004.57	-6053004.44	0.0073	0.0041
Mercury	-21285-01-07 23:31 J	-6052916.62	-6052916.52	-6052916.39	0.0073	0.0050
Mercury	-21285-04-05 01:11 J	-6052828.54	-6052828.45	-6052828.35	0.0073	0.0058

Mercury	-21285-07-02 02:23 J	-6052740.44	-6052740.40	-6052740.32	0.0073	0.0067
Venus	-21217-06-13 16:33 J	-6027921.96	-6027921.81	-6027921.63	0.0080	0.0054
Venus	-21216-01-25 03:50 J	-6027696.55	-6027696.34	-6027696.11	0.0080	0.0020
Earth	-21210-02-15 18:43 J	-6025483.97	-6025483.72	-6025483.46	0.0077	0.0014
Moon	-21210-02-15 22:19 J	-6025483.82	-6025483.57	-6025483.31	0.0077	0.0010 *
Mercury	-21204-05-01 13:11 J	-6023216.98	-6023216.95	-6023216.89	0.0073	0.0070
Mercury	-21204-07-28 14:23 J	-6023128.96	-6023128.90	-6023128.80	0.0073	0.0063
Mercury	-21204-10-24 16:04 J	-6023040.93	-6023040.83	-6023040.71	0.0073	0.0054
Mercury	-21203-01-20 17:31 J	-6022952.89	-6022952.77	-6022952.64	0.0073	0.0045
Mercury	-21203-04-18 18:43 J	-6022864.84	-6022864.72	-6022864.57	0.0073	0.0037
Mercury	-21203-07-15 20:09 J	-6022776.79	-6022776.66	-6022776.51	0.0073	0.0029
Mercury	-21203-10-11 21:36 J	-6022688.75	-6022688.60	-6022688.45	0.0073	0.0021
Mercury	-21202-01-07 23:02 J	-6022600.70	-6022600.54	-6022600.39	0.0072	0.0013
Mercury	-21202-04-06 00:14 J	-6022512.64	-6022512.49	-6022512.33	0.0072	0.0005
Mercury	-21202-07-03 01:26 J	-6022424.59	-6022424.44	-6022424.28	0.0072	0.0004
Mercury	-21202-09-29 02:38 J	-6022336.54	-6022336.39	-6022336.23	0.0072	0.0011
Mercury	-21202-12-26 03:50 J	-6022248.48	-6022248.34	-6022248.18	0.0072	0.0019
Mercury	-21201-03-23 05:16 J	-6022160.42	-6022160.28	-6022160.14	0.0072	0.0026
Mercury	-21201-06-19 06:28 J	-6022072.36	-6022072.23	-6022072.09	0.0072	0.0034
Mercury	-21201-09-15 07:26 J	-6021984.30	-6021984.19	-6021984.05	0.0072	0.0042
Mercury	-21201-12-12 08:52 J	-6021896.24	-6021896.13	-6021896.01	0.0071	0.0049
Mercury	-21200-03-10 09:50 J	-6021808.17	-6021808.09	-6021807.98	0.0071	0.0056
Mercury	-21200-06-06 11:02 J	-6021720.10	-6021720.04	-6021719.96	0.0071	0.0064
Mercury	-21200-09-02 12:28 J	-6021631.99	-6021631.98	-6021631.96	0.0071	0.0071
Venus	-21059-03-31 16:19 J	-5970286.96	-5970286.82	-5970286.63	0.0064	0.0043
Venus	-21059-11-11 20:23 J	-5970061.86	-5970061.65	-5970061.43	0.0064	0.0007
Venus	-21058-06-25 00:28 J	-5969836.67	-5969836.48	-5969836.29	0.0065	0.0030
Mars	-21054-01-28 17:16 J	-5968523.09	-5968522.78	-5968522.45	0.0066	0.0008
Earth	-21050-08-14 00:43 J	-5966864.71	-5966864.47	-5966864.22	0.0068	0.0022
Moon	-21050-08-14 04:19 J	-5966864.56	-5966864.32	-5966864.08	0.0068	0.0024 *

Mercury	-21042-01-11 15:36 J	-5964156.87	-5964156.85	-5964156.79	0.0071	0.0069
Mercury	-21042-04-09 17:02 J	-5964068.85	-5964068.79	-5964068.69	0.0071	0.0062
Mercury	-21042-07-06 18:28 J	-5963980.82	-5963980.73	-5963980.61	0.0071	0.0054
Mercury	-21042-10-02 20:09 J	-5963892.78	-5963892.66	-5963892.54	0.0071	0.0046
Mercury	-21042-12-29 21:07 J	-5963804.74	-5963804.62	-5963804.47	0.0072	0.0039
Mercury	-21041-03-26 22:33 J	-5963716.69	-5963716.56	-5963716.41	0.0072	0.0031
Mercury	-21041-06-23 00:00 J	-5963628.64	-5963628.50	-5963628.34	0.0072	0.0023
Mercury	-21041-09-19 01:26 J	-5963540.59	-5963540.44	-5963540.28	0.0072	0.0015
Mercury	-21041-12-16 02:52 J	-5963452.54	-5963452.38	-5963452.22	0.0072	0.0007
Mercury	-21040-03-14 04:19 J	-5963364.48	-5963364.32	-5963364.16	0.0072	0.0002
Mercury	-21040-06-10 05:45 J	-5963276.42	-5963276.26	-5963276.10	0.0072	0.0010
Mercury	-21040-09-06 07:11 J	-5963188.35	-5963188.20	-5963188.04	0.0072	0.0018
Mercury	-21040-12-03 08:23 J	-5963100.29	-5963100.15	-5963099.99	0.0073	0.0027
Mercury	-21039-03-01 09:50 J	-5963012.22	-5963012.09	-5963011.93	0.0073	0.0035
Mercury	-21039-05-28 11:31 J	-5962924.15	-5962924.02	-5962923.89	0.0073	0.0043
Mercury	-21039-08-24 12:43 J	-5962836.07	-5962835.97	-5962835.84	0.0073	0.0052
Mercury	-21039-11-20 14:23 J	-5962747.98	-5962747.90	-5962747.80	0.0073	0.0060
Mercury	-21038-02-16 15:36 J	-5962659.88	-5962659.85	-5962659.77	0.0073	0.0069

# 21ST MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 21st millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Venus	-20970-02-22 21:50 J	-5937816.79	-5937816.59	-5937816.37	0.0080	0.0031
Venus	-20970-10-06 09:07 J	-5937591.31	-5937591.12	-5937590.93	0.0080	0.0042
Mars	-20967-06-14 01:11 J	-5936609.67	-5936609.45	-5936609.19	0.0078	0.0050
Earth	-20963-02-17 22:48 J	-5935264.67	-5935264.55	-5935264.39	0.0076	0.0064
Moon	-20963-02-18 02:09 J	-5935264.55	-5935264.41	-5935264.24	0.0076	0.0061 *
Mercury	-20958-12-17 02:52 J	-5933136.43	-5933136.38	-5933136.32	0.0073	0.0068
Mercury	-20957-03-14 04:04 J	-5933048.40	-5933048.33	-5933048.23	0.0073	0.0060
Mercury	-20957-06-10 05:16 J	-5932960.37	-5932960.28	-5932960.15	0.0073	0.0052
Mercury	-20957-09-06 07:11 J	-5932872.33	-5932872.20	-5932872.08	0.0073	0.0043
Mercury	-20957-12-03 08:23 J	-5932784.28	-5932784.15	-5932784.01	0.0073	0.0035
Mercury	-20956-03-01 09:50 J	-5932696.23	-5932696.09	-5932695.94	0.0073	0.0027
Mercury	-20956-05-28 11:02 J	-5932608.19	-5932608.04	-5932607.88	0.0072	0.0019
Mercury	-20956-08-24 12:28 J	-5932520.13	-5932519.98	-5932519.83	0.0072	0.0011
Mercury	-20956-11-20 13:40 J	-5932432.08	-5932431.93	-5932431.77	0.0072	0.0003
Mercury	-20955-02-16 15:07 J	-5932344.03	-5932343.87	-5932343.72	0.0072	0.0005
Mercury	-20955-05-15 16:19 J	-5932255.97	-5932255.82	-5932255.67	0.0072	0.0013
Mercury	-20955-08-11 17:16 J	-5932167.92	-5932167.78	-5932167.62	0.0072	0.0021
Mercury	-20955-11-07 18:43 J	-5932079.86	-5932079.72	-5932079.57	0.0072	0.0028
Mercury	-20954-02-03 19:55 J	-5931991.80	-5931991.67	-5931991.53	0.0072	0.0036
Mercury	-20954-05-02 20:52 J	-5931903.73	-5931903.63	-5931903.49	0.0072	0.0044
Mercury	-20954-07-29 22:19 J	-5931815.67	-5931815.57	-5931815.45	0.0071	0.0051
Mercury	-20954-10-25 23:16 J	-5931727.60	-5931727.53	-5931727.42	0.0071	0.0058
Mercury	-20953-01-22 00:28 J	-5931639.52	-5931639.48	-5931639.40	0.0071	0.0066
Venus	-20813-12-09 18:43 J	-5880181.87	-5880181.72	-5880181.51	0.0064	0.0036
Venus	-20812-07-22 23:02 J	-5879956.76	-5879956.54	-5879956.33	0.0064	0.0001
Venus	-20811-03-05 02:09 J	-5879731.57	-5879731.41	-5879731.21	0.0065	0.0037
Jupiter	-20810-11-27 12:14 J	-5879098.99	-5879098.99	-5879098.89	0.0065	0.0065
Mars	-20808-06-19 10:33 J	-5878529.28	-5878529.06	-5878528.77	0.0066	0.0041
Earth	-20803-08-15 21:07 J	-5876645.85	-5876645.62	-5876645.36	0.0068	0.0023
Moon	-20803-08-16 00:00 J	-5876645.72	-5876645.50	-5876645.26	0.0068	0.0026 *

Mercury	-20796-08-28 04:19 J	-5874076.32	-5874076.32	-5874076.28	0.0071	0.0070
Mercury	-20796-11-24 06:00 J	-5873988.32	-5873988.25	-5873988.17	0.0071	0.0063
Mercury	-20795-02-20 06:57 J	-5873900.29	-5873900.21	-5873900.09	0.0071	0.0056
Mercury	-20795-05-19 08:23 J	-5873812.25	-5873812.15	-5873812.02	0.0071	0.0048
Mercury	-20795-08-15 09:50 J	-5873724.21	-5873724.09	-5873723.95	0.0072	0.0040
Mercury	-20795-11-11 11:16 J	-5873636.16	-5873636.03	-5873635.88	0.0072	0.0032
Mercury	-20794-02-07 12:43 J	-5873548.11	-5873547.97	-5873547.81	0.0072	0.0024
Mercury	-20794-05-06 14:09 J	-5873460.06	-5873459.91	-5873459.75	0.0072	0.0016
Mercury	-20794-08-02 15:36 J	-5873372.01	-5873371.85	-5873371.69	0.0072	0.0008
Mercury	-20794-10-29 17:02 J	-5873283.95	-5873283.79	-5873283.63	0.0072	0.0000
Mercury	-20793-01-25 18:28 J	-5873195.89	-5873195.73	-5873195.57	0.0072	0.0008
Mercury	-20793-04-22 19:40 J	-5873107.83	-5873107.68	-5873107.51	0.0072	0.0017
Mercury	-20793-07-19 21:21 J	-5873019.76	-5873019.61	-5873019.46	0.0073	0.0025
Mercury	-20793-10-15 22:48 J	-5872931.69	-5872931.55	-5872931.41	0.0073	0.0033
Mercury	-20792-01-12 00:00 J	-5872843.62	-5872843.50	-5872843.36	0.0073	0.0042
Mercury	-20792-04-10 01:40 J	-5872755.54	-5872755.43	-5872755.31	0.0073	0.0050
Mercury	-20792-07-07 02:52 J	-5872667.46	-5872667.38	-5872667.27	0.0073	0.0059
Mercury	-20792-10-03 04:33 J	-5872579.36	-5872579.31	-5872579.24	0.0073	0.0068
Venus	-20724-11-02 23:45 J	-5847711.72	-5847711.51	-5847711.29	0.0080	0.0023
Venus	-20723-06-16 10:33 J	-5847486.22	-5847486.06	-5847485.87	0.0080	0.0050
Mars	-20721-11-02 17:31 J	-5846616.07	-5846615.77	-5846615.45	0.0078	0.0011
Earth	-20717-02-18 21:50 J	-5845412.82	-5845412.59	-5845412.33	0.0077	0.0025
Moon	-20717-02-18 22:19 J	-5845412.82	-5845412.57	-5845412.31	0.0077	0.0026 *
Mercury	-20711-08-02 14:52 J	-5843055.89	-5843055.88	-5843055.82	0.0073	0.0072
Mercury	-20711-10-29 16:33 J	-5842967.88	-5842967.81	-5842967.72	0.0073	0.0063
Mercury	-20710-01-25 18:00 J	-5842879.85	-5842879.75	-5842879.64	0.0073	0.0054
Mercury	-20710-04-23 19:11 J	-5842791.81	-5842791.70	-5842791.56	0.0073	0.0046
Mercury	-20710-07-20 20:38 J	-5842703.76	-5842703.64	-5842703.50	0.0073	0.0038
Mercury	-20710-10-16 21:50 J	-5842615.72	-5842615.59	-5842615.43	0.0073	0.0030
Mercury	-20709-01-12 23:16 J	-5842527.67	-5842527.53	-5842527.37	0.0072	0.0022

Mercury	-20709-04-10 00:43 J	-5842439.62	-5842439.47	-5842439.31	0.0072	0.0013
Mercury	-20709-07-07 02:09 J	-5842351.57	-5842351.41	-5842351.25	0.0072	0.0005
Mercury	-20709-10-03 03:21 J	-5842263.51	-5842263.36	-5842263.20	0.0072	0.0003
Mercury	-20709-12-30 04:33 J	-5842175.46	-5842175.31	-5842175.15	0.0072	0.0011
Mercury	-20708-03-28 06:00 J	-5842087.40	-5842087.25	-5842087.10	0.0072	0.0018
Mercury	-20708-06-24 07:11 J	-5841999.34	-5841999.20	-5841999.05	0.0072	0.0026
Mercury	-20708-09-20 08:09 J	-5841911.28	-5841911.16	-5841911.01	0.0072	0.0034
Mercury	-20708-12-17 09:36 J	-5841823.22	-5841823.10	-5841822.97	0.0072	0.0041
Mercury	-20707-03-15 10:33 J	-5841735.16	-5841735.06	-5841734.93	0.0071	0.0049
Mercury	-20707-06-11 11:45 J	-5841647.09	-5841647.01	-5841646.90	0.0071	0.0056
Mercury	-20707-09-07 12:57 J	-5841559.01	-5841558.96	-5841558.88	0.0071	0.0063
Mercury	-20707-12-04 14:23 J	-5841470.91	-5841470.90	-5841470.88	0.0071	0.0070
Venus	-20566-08-20 19:11 J	-5790076.86	-5790076.70	-5790076.51	0.0064	0.0037
Venus	-20565-04-01 23:02 J	-5789851.75	-5789851.54	-5789851.32	0.0064	0.0002
Venus	-20565-11-13 02:23 J	-5789626.56	-5789626.40	-5789626.20	0.0065	0.0035
Earth	-20557-08-15 22:48 J	-5786793.73	-5786793.55	-5786793.35	0.0068	0.0046
Moon	-20557-08-15 23:16 J	-5786793.72	-5786793.53	-5786793.31	0.0068	0.0043 *
Earth	-20556-08-17 13:11 J	-5786427.06	-5786426.95	-5786426.76	0.0068	0.0056
Moon	-20556-08-17 14:09 J	-5786427.03	-5786426.91	-5786426.72	0.0068	0.0053 *
Mercury	-20549-07-10 17:31 J	-5783907.81	-5783907.77	-5783907.72	0.0071	0.0068
Mercury	-20549-10-06 18:28 J	-5783819.79	-5783819.73	-5783819.63	0.0071	0.0061
Mercury	-20548-01-02 20:09 J	-5783731.76	-5783731.66	-5783731.55	0.0071	0.0053
Mercury	-20548-03-31 21:36 J	-5783643.72	-5783643.60	-5783643.47	0.0072	0.0045
Mercury	-20548-06-27 23:02 J	-5783555.68	-5783555.54	-5783555.41	0.0072	0.0037
Mercury	-20548-09-24 00:00 J	-5783467.63	-5783467.50	-5783467.34	0.0072	0.0030
Mercury	-20548-12-21 01:40 J	-5783379.58	-5783379.43	-5783379.27	0.0072	0.0021
Mercury	-20547-03-19 03:07 J	-5783291.53	-5783291.37	-5783291.21	0.0072	0.0013
Mercury	-20547-06-15 04:33 J	-5783203.47	-5783203.31	-5783203.15	0.0072	0.0005
Mercury	-20547-09-11 06:00 J	-5783115.41	-5783115.25	-5783115.09	0.0072	0.0003
Mercury	-20547-12-08 07:11 J	-5783027.35	-5783027.20	-5783027.03	0.0072	0.0012

Mercury	-20546-03-06 08:38 J	-5782939.29	-5782939.14	-5782938.98	0.0072	0.0020
Mercury	-20546-06-02 10:04 J	-5782851.22	-5782851.08	-5782850.92	0.0073	0.0028
Mercury	-20546-08-29 11:45 J	-5782763.15	-5782763.01	-5782762.87	0.0073	0.0036
Mercury	-20546-11-25 12:57 J	-5782675.08	-5782674.96	-5782674.82	0.0073	0.0045
Mercury	-20545-02-21 14:38 J	-5782587.00	-5782586.89	-5782586.78	0.0073	0.0053
Mercury	-20545-05-19 15:50 J	-5782498.91	-5782498.84	-5782498.74	0.0073	0.0062
Mercury	-20545-08-15 17:16 J	-5782410.80	-5782410.78	-5782410.72	0.0073	0.0071
Venus	-20477-07-13 23:02 J	-5757606.74	-5757606.54	-5757606.31	0.0080	0.0025
Venus	-20476-02-24 09:50 J	-5757381.25	-5757381.09	-5757380.89	0.0080	0.0048
Earth	-20470-02-20 17:16 J	-5755194.01	-5755193.78	-5755193.52	0.0076	0.0024
Moon	-20470-02-20 19:55 J	-5755193.92	-5755193.67	-5755193.41	0.0076	0.0022 *
Mercury	-20464-06-15 04:19 J	-5752887.37	-5752887.32	-5752887.26	0.0073	0.0068
Mercury	-20464-09-11 05:31 J	-5752799.35	-5752799.27	-5752799.17	0.0073	0.0059
Mercury	-20464-12-08 06:57 J	-5752711.31	-5752711.21	-5752711.09	0.0073	0.0051
Mercury	-20463-03-06 08:09 J	-5752623.27	-5752623.16	-5752623.02	0.0073	0.0043
Mercury	-20463-06-02 09:50 J	-5752535.23	-5752535.09	-5752534.95	0.0073	0.0034
Mercury	-20463-08-29 11:16 J	-5752447.18	-5752447.03	-5752446.89	0.0073	0.0026
Mercury	-20463-11-25 12:14 J	-5752359.13	-5752358.99	-5752358.83	0.0072	0.0019
Mercury	-20462-02-21 13:40 J	-5752271.08	-5752270.93	-5752270.77	0.0072	0.0010
Mercury	-20462-05-20 15:07 J	-5752183.02	-5752182.87	-5752182.71	0.0072	0.0002
Mercury	-20462-08-16 16:19 J	-5752094.97	-5752094.82	-5752094.66	0.0072	0.0006
Mercury	-20462-11-12 17:31 J	-5752006.91	-5752006.77	-5752006.61	0.0072	0.0014
Mercury	-20461-02-08 18:43 J	-5751918.86	-5751918.72	-5751918.56	0.0072	0.0022
Mercury	-20461-05-06 20:09 J	-5751830.80	-5751830.66	-5751830.52	0.0072	0.0029
Mercury	-20461-08-02 21:21 J	-5751742.74	-5751742.61	-5751742.47	0.0072	0.0037
Mercury	-20461-10-29 22:19 J	-5751654.67	-5751654.57	-5751654.43	0.0071	0.0045
Mercury	-20460-01-25 23:45 J	-5751566.61	-5751566.51	-5751566.40	0.0071	0.0052
Mercury	-20460-04-24 00:43 J	-5751478.54	-5751478.47	-5751478.37	0.0071	0.0059
Mercury	-20460-07-21 02:09 J	-5751390.46	-5751390.41	-5751390.35	0.0071	0.0066
Venus	-20319-04-30 18:28 J	-5699971.88	-5699971.73	-5699971.55	0.0064	0.0042



Venus	-20319-12-11 22:33 J	-5699746.78	-5699746.56	-5699746.35	0.0064	0.0007
Venus	-20318-07-25 01:55 J	-5699521.60	-5699521.42	-5699521.21	0.0064	0.0030
Earth	-20310-08-18 12:57 J	-5696575.19	-5696574.96	-5696574.69	0.0068	0.0020
Moon	-20310-08-18 15:50 J	-5696575.08	-5696574.84	-5696574.58	0.0068	0.0022 *
Mercury	-20302-05-24 05:31 J	-5693739.30	-5693739.27	-5693739.20	0.0071	0.0067
Mercury	-20302-08-20 06:57 J	-5693651.28	-5693651.21	-5693651.11	0.0071	0.0060
Mercury	-20302-11-16 08:38 J	-5693563.25	-5693563.14	-5693563.03	0.0071	0.0052
Mercury	-20301-02-12 09:36 J	-5693475.21	-5693475.10	-5693474.96	0.0072	0.0045
Mercury	-20301-05-10 11:02 J	-5693387.17	-5693387.04	-5693386.89	0.0072	0.0037
Mercury	-20301-08-06 12:28 J	-5693299.12	-5693298.98	-5693298.83	0.0072	0.0029
Mercury	-20301-11-02 13:55 J	-5693211.07	-5693210.92	-5693210.76	0.0072	0.0021
Mercury	-20300-01-29 15:21 J	-5693123.01	-5693122.86	-5693122.70	0.0072	0.0013
Mercury	-20300-04-27 16:48 J	-5693034.96	-5693034.80	-5693034.64	0.0072	0.0005
Mercury	-20300-07-24 18:14 J	-5692946.90	-5692946.74	-5692946.58	0.0072	0.0004
Mercury	-20300-10-20 19:40 J	-5692858.84	-5692858.68	-5692858.52	0.0072	0.0012
Mercury	-20299-01-16 20:52 J	-5692770.78	-5692770.63	-5692770.47	0.0072	0.0021
Mercury	-20299-04-14 22:19 J	-5692682.71	-5692682.57	-5692682.41	0.0073	0.0029
Mercury	-20299-07-12 00:00 J	-5692594.64	-5692594.50	-5692594.36	0.0073	0.0037
Mercury	-20299-10-08 01:11 J	-5692506.56	-5692506.45	-5692506.31	0.0073	0.0046
Mercury	-20298-01-04 02:52 J	-5692418.48	-5692418.38	-5692418.27	0.0073	0.0054
Mercury	-20298-04-02 04:04 J	-5692330.39	-5692330.33	-5692330.23	0.0073	0.0063
Mercury	-20298-06-29 06:00 J	-5692242.28	-5692242.25	-5692242.22	0.0073	0.0072
Venus	-20230-03-24 19:26 J	-5667501.88	-5667501.69	-5667501.49	0.0080	0.0040
Venus	-20230-11-05 06:14 J	-5667276.43	-5667276.24	-5667276.02	0.0080	0.0033
Earth	-20223-02-22 08:09 J	-5664975.32	-5664975.16	-5664974.96	0.0076	0.0055
Moon	-20223-02-22 11:16 J	-5664975.17	-5664975.03	-5664974.83	0.0076	0.0058 *
Mercury	-20217-04-27 16:33 J	-5662718.86	-5662718.81	-5662718.76	0.0073	0.0068
Mercury	-20217-07-24 17:45 J	-5662630.84	-5662630.76	-5662630.66	0.0073	0.0060
Mercury	-20217-10-20 18:57 J	-5662542.80	-5662542.71	-5662542.58	0.0073	0.0052
Mercury	-20216-01-16 20:38 J	-5662454.76	-5662454.64	-5662454.51	0.0073	0.0043

Mercury	-20216-04-14 22:04 J	-5662366.72	-5662366.58	-5662366.44	0.0073	0.0035
Mercury	-20216-07-11 23:16 J	-5662278.67	-5662278.53	-5662278.38	0.0072	0.0027
Mercury	-20216-10-08 00:43 J	-5662190.62	-5662190.47	-5662190.32	0.0072	0.0019
Mercury	-20215-01-04 01:55 J	-5662102.57	-5662102.42	-5662102.26	0.0072	0.0011
Mercury	-20215-04-02 03:21 J	-5662014.52	-5662014.36	-5662014.21	0.0072	0.0003
Mercury	-20215-06-29 04:33 J	-5661926.46	-5661926.31	-5661926.15	0.0072	0.0005
Mercury	-20215-09-25 05:45 J	-5661838.41	-5661838.26	-5661838.10	0.0072	0.0013
Mercury	-20215-12-22 06:57 J	-5661750.35	-5661750.21	-5661750.06	0.0072	0.0021
Mercury	-20214-03-20 08:09 J	-5661662.29	-5661662.16	-5661662.01	0.0072	0.0029
Mercury	-20214-06-16 09:21 J	-5661574.23	-5661574.11	-5661573.97	0.0072	0.0036
Mercury	-20214-09-12 10:48 J	-5661486.17	-5661486.05	-5661485.93	0.0071	0.0044
Mercury	-20214-12-09 11:45 J	-5661398.10	-5661398.01	-5661397.89	0.0071	0.0051
Mercury	-20213-03-06 13:11 J	-5661310.03	-5661309.95	-5661309.86	0.0071	0.0059
Mercury	-20213-06-02 14:09 J	-5661221.95	-5661221.91	-5661221.84	0.0071	0.0066
Venus	-20072-01-08 15:07 J	-5609866.96	-5609866.87	-5609866.74	0.0064	0.0055
Venus	-20072-08-21 19:11 J	-5609641.90	-5609641.70	-5609641.49	0.0064	0.0020
Venus	-20071-04-03 22:33 J	-5609416.75	-5609416.56	-5609416.33	0.0064	0.0017
Venus	-20071-11-15 02:09 J	-5609191.51	-5609191.41	-5609191.26	0.0065	0.0053
Mars	-20067-07-10 20:23 J	-5607857.93	-5607857.65	-5607857.34	0.0066	0.0027
Earth	-20063-08-19 23:16 J	-5606356.79	-5606356.53	-5606356.27	0.0068	0.0006
Moon	-20063-08-20 02:52 J	-5606356.64	-5606356.38	-5606356.12	0.0068	0.0006 *
Mercury	-20055-04-05 17:02 J	-5603570.80	-5603570.79	-5603570.75	0.0071	0.0071
Mercury	-20055-07-02 18:43 J	-5603482.79	-5603482.72	-5603482.65	0.0071	0.0063
Mercury	-20055-09-28 19:40 J	-5603394.77	-5603394.68	-5603394.57	0.0071	0.0055
Mercury	-20055-12-25 21:07 J	-5603306.73	-5603306.62	-5603306.49	0.0072	0.0048
Mercury	-20054-03-23 22:33 J	-5603218.69	-5603218.56	-5603218.42	0.0072	0.0040
Mercury	-20054-06-19 23:45 J	-5603130.64	-5603130.51	-5603130.36	0.0072	0.0032
Mercury	-20054-09-16 01:11 J	-5603042.59	-5603042.45	-5603042.29	0.0072	0.0024
Mercury	-20054-12-13 02:38 J	-5602954.54	-5602954.39	-5602954.23	0.0072	0.0016
Mercury	-20053-03-10 04:04 J	-5602866.49	-5602866.33	-5602866.17	0.0072	0.0008

Mercury	-20053-06-06 05:31 J	-5602778.43	-5602778.27	-5602778.11	0.0072	0.0000
Mercury	-20053-09-02 06:57 J	-5602690.37	-5602690.21	-5602690.05	0.0072	0.0008
Mercury	-20053-11-29 08:23 J	-5602602.31	-5602602.15	-5602602.00	0.0072	0.0017
Mercury	-20052-02-25 09:36 J	-5602514.24	-5602514.10	-5602513.94	0.0073	0.0025
Mercury	-20052-05-24 11:02 J	-5602426.17	-5602426.04	-5602425.89	0.0073	0.0034
Mercury	-20052-08-20 12:28 J	-5602338.10	-5602337.98	-5602337.84	0.0073	0.0042
Mercury	-20052-11-16 13:40 J	-5602250.02	-5602249.93	-5602249.80	0.0073	0.0051
Mercury	-20051-02-12 15:36 J	-5602161.94	-5602161.85	-5602161.76	0.0073	0.0059
Mercury	-20051-05-11 16:48 J	-5602073.84	-5602073.80	-5602073.73	0.0073	0.0068

# 20TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 20th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-19984-12-02 12:57 J	-5577397.07	-5577396.96	-5577396.81	0.0080	0.0065		
Venus	-19983-07-16 00:28 J	-5577171.70	-5577171.48	-5577171.25	0.0080	0.0008		
Venus	-19982-02-26 11:02 J	-5576946.04	-5576946.04	-5576946.00	0.0080	0.0080		
Moon	-19977-02-22 16:04 J	-5575123.91	-5575123.83	-5575123.69	0.0077	0.0070		
Earth	-19977-02-22 18:43 J	-5575123.76	-5575123.72	-5575123.61	0.0077	0.0074	*	
Earth	-19976-02-23 19:40 J	-5574756.69	-5574756.68	-5574756.61	0.0076	0.0076		
Moon	-19976-02-23 23:02 J	-5574756.61	-5574756.54	-5574756.43	0.0076	0.0072	*	
Mercury	-19970-03-11 03:36 J	-5572550.36	-5572550.35	-5572550.31	0.0073	0.0072		
Mercury	-19970-06-07 05:16 J	-5572462.35	-5572462.28	-5572462.20	0.0073	0.0063		

Mercury	-19970-09-03 06:28 J	-5572374.32	-5572374.23	-5572374.12	0.0073	0.0055
Mercury	-19970-11-30 07:40 J	-5572286.28	-5572286.18	-5572286.04	0.0073	0.0047
Mercury	-19969-02-26 09:36 J	-5572198.24	-5572198.10	-5572197.97	0.0073	0.0038
Mercury	-19969-05-24 10:48 J	-5572110.19	-5572110.05	-5572109.91	0.0072	0.0030
Mercury	-19969-08-20 12:00 J	-5572022.14	-5572022.00	-5572021.84	0.0072	0.0022
Mercury	-19969-11-16 13:26 J	-5571934.09	-5571933.94	-5571933.78	0.0072	0.0014
Mercury	-19968-02-12 14:38 J	-5571846.04	-5571845.89	-5571845.73	0.0072	0.0006
Mercury	-19968-05-11 16:04 J	-5571757.99	-5571757.83	-5571757.67	0.0072	0.0002
Mercury	-19968-08-07 17:16 J	-5571669.93	-5571669.78	-5571669.62	0.0072	0.0010
Mercury	-19968-11-03 18:43 J	-5571581.87	-5571581.72	-5571581.57	0.0072	0.0018
Mercury	-19967-01-30 19:55 J	-5571493.82	-5571493.67	-5571493.53	0.0072	0.0026
Mercury	-19967-04-28 20:52 J	-5571405.76	-5571405.63	-5571405.48	0.0072	0.0034
Mercury	-19967-07-25 22:04 J	-5571317.70	-5571317.58	-5571317.44	0.0071	0.0041
Mercury	-19967-10-21 23:31 J	-5571229.63	-5571229.52	-5571229.41	0.0071	0.0049
Mercury	-19966-01-18 00:28 J	-5571141.56	-5571141.48	-5571141.37	0.0071	0.0056
Mercury	-19966-04-16 01:55 J	-5571053.49	-5571053.42	-5571053.35	0.0071	0.0063
Mercury	-19966-07-13 02:52 J	-5570965.38	-5570965.38	-5570965.36	0.0071	0.0071
Venus	-19825-05-01 14:23 J	-5519537.05	-5519536.90	-5519536.69	0.0064	0.0036
Venus	-19825-12-12 18:43 J	-5519311.94	-5519311.72	-5519311.50	0.0064	0.0000
Venus	-19824-07-25 22:19 J	-5519086.74	-5519086.57	-5519086.38	0.0064	0.0036
Mars	-19821-11-28 15:07 J	-5517865.02	-5517864.87	-5517864.70	0.0066	0.0057
Earth	-19816-08-21 07:40 J	-5516138.44	-5516138.18	-5516137.93	0.0068	0.0002
Moon	-19816-08-21 10:48 J	-5516138.30	-5516138.05	-5516137.79	0.0068	0.0005 *
Mercury	-19808-05-15 05:02 J	-5513314.31	-5513314.29	-5513314.23	0.0071	0.0069
Mercury	-19808-08-11 06:28 J	-5513226.30	-5513226.23	-5513226.13	0.0071	0.0061
Mercury	-19808-11-07 07:55 J	-5513138.27	-5513138.17	-5513138.06	0.0071	0.0053
Mercury	-19807-02-03 09:21 J	-5513050.23	-5513050.11	-5513049.99	0.0072	0.0045
Mercury	-19807-05-02 10:19 J	-5512962.19	-5512962.07	-5512961.92	0.0072	0.0038
Mercury	-19807-07-29 11:45 J	-5512874.14	-5512874.01	-5512873.85	0.0072	0.0030
Mercury	-19807-10-25 13:26 J	-5512786.09	-5512785.94	-5512785.79	0.0072	0.0021

Mercury	-19806-01-21 14:52 J	-5512698.04	-5512697.88	-5512697.73	0.0072	0.0013
Mercury	-19806-04-19 16:04 J	-5512609.98	-5512609.83	-5512609.67	0.0072	0.0006
Mercury	-19806-07-16 17:31 J	-5512521.93	-5512521.77	-5512521.61	0.0072	0.0003
Mercury	-19806-10-12 18:57 J	-5512433.87	-5512433.71	-5512433.55	0.0072	0.0011
Mercury	-19805-01-08 20:23 J	-5512345.80	-5512345.65	-5512345.49	0.0073	0.0020
Mercury	-19805-04-05 21:50 J	-5512257.74	-5512257.59	-5512257.44	0.0073	0.0028
Mercury	-19805-07-02 23:02 J	-5512169.67	-5512169.54	-5512169.39	0.0073	0.0037
Mercury	-19805-09-29 00:43 J	-5512081.59	-5512081.47	-5512081.34	0.0073	0.0045
Mercury	-19805-12-26 01:55 J	-5511993.51	-5511993.42	-5511993.30	0.0073	0.0054
Mercury	-19804-03-24 03:36 J	-5511905.43	-5511905.35	-5511905.26	0.0073	0.0063
Mercury	-19804-06-20 04:48 J	-5511817.32	-5511817.30	-5511817.25	0.0073	0.0072
Venus	-19736-03-25 14:38 J	-5487067.09	-5487066.89	-5487066.67	0.0080	0.0029
Venus	-19736-11-06 01:40 J	-5486841.60	-5486841.43	-5486841.22	0.0080	0.0043
Mars	-19733-04-14 15:21 J	-5485951.11	-5485950.86	-5485950.56	0.0078	0.0036
Moon	-19730-02-24 00:57 J	-5484905.53	-5484905.46	-5484905.33	0.0077	0.0071
Earth	-19730-02-24 02:23 J	-5484905.51	-5484905.40	-5484905.29	0.0077	0.0069 *
Mercury	-19723-04-19 15:21 J	-5482293.88	-5482293.86	-5482293.81	0.0073	0.0071
Mercury	-19723-07-16 17:02 J	-5482205.87	-5482205.79	-5482205.71	0.0073	0.0062
Mercury	-19723-10-12 18:14 J	-5482117.83	-5482117.74	-5482117.62	0.0073	0.0054
Mercury	-19722-01-08 19:26 J	-5482029.79	-5482029.69	-5482029.55	0.0073	0.0046
Mercury	-19722-04-06 20:52 J	-5481941.75	-5481941.63	-5481941.48	0.0073	0.0038
Mercury	-19722-07-03 22:33 J	-5481853.70	-5481853.56	-5481853.42	0.0072	0.0029
Mercury	-19722-09-29 23:45 J	-5481765.65	-5481765.51	-5481765.35	0.0072	0.0021
Mercury	-19722-12-27 01:11 J	-5481677.60	-5481677.45	-5481677.29	0.0072	0.0012
Mercury	-19721-03-24 02:23 J	-5481589.55	-5481589.40	-5481589.24	0.0072	0.0005
Mercury	-19721-06-20 03:50 J	-5481501.50	-5481501.34	-5481501.18	0.0072	0.0003
Mercury	-19721-09-16 05:02 J	-5481413.44	-5481413.29	-5481413.13	0.0072	0.0011
Mercury	-19721-12-13 06:14 J	-5481325.38	-5481325.24	-5481325.08	0.0072	0.0019
Mercury	-19720-03-11 07:40 J	-5481237.32	-5481237.18	-5481237.04	0.0072	0.0027
Mercury	-19720-06-07 08:52 J	-5481149.26	-5481149.13	-5481148.99	0.0071	0.0035

Mercury	-19720-09-03 09:50 J	-5481061.20	-5481061.09	-5481060.95	0.0071	0.0043
Mercury	-19720-11-30 11:16 J	-5480973.14	-5480973.03	-5480972.92	0.0071	0.0050
Mercury	-19719-02-26 12:14 J	-5480885.07	-5480884.99	-5480884.89	0.0071	0.0057
Mercury	-19719-05-25 13:11 J	-5480796.99	-5480796.95	-5480796.86	0.0071	0.0065
Venus	-19578-01-10 07:26 J	-5429432.23	-5429432.19	-5429432.10	0.0064	0.0061
Venus	-19578-08-23 11:16 J	-5429207.22	-5429207.03	-5429206.82	0.0064	0.0026
Venus	-19577-04-04 15:07 J	-5428982.08	-5428981.87	-5428981.65	0.0064	0.0010
Venus	-19577-11-15 18:43 J	-5428756.86	-5428756.72	-5428756.55	0.0065	0.0046
Earth	-19569-08-22 10:19 J	-5425920.32	-5425920.07	-5425919.80	0.0068	0.0007
Moon	-19569-08-22 12:43 J	-5425920.21	-5425919.97	-5425919.71	0.0068	0.0010 *
Mercury	-19561-06-23 16:19 J	-5423057.84	-5423057.82	-5423057.81	0.0071	0.0071
Mercury	-19561-09-19 17:16 J	-5422969.84	-5422969.78	-5422969.70	0.0071	0.0063
Mercury	-19561-12-16 18:43 J	-5422881.81	-5422881.72	-5422881.61	0.0071	0.0056
Mercury	-19560-03-14 19:55 J	-5422793.77	-5422793.67	-5422793.54	0.0072	0.0048
Mercury	-19560-06-10 21:21 J	-5422705.73	-5422705.61	-5422705.47	0.0072	0.0040
Mercury	-19560-09-06 22:48 J	-5422617.69	-5422617.55	-5422617.40	0.0072	0.0032
Mercury	-19560-12-04 00:14 J	-5422529.64	-5422529.49	-5422529.34	0.0072	0.0024
Mercury	-19559-03-02 01:26 J	-5422441.59	-5422441.44	-5422441.28	0.0072	0.0016
Mercury	-19559-05-29 02:52 J	-5422353.53	-5422353.38	-5422353.22	0.0072	0.0008
Mercury	-19559-08-25 04:19 J	-5422265.48	-5422265.32	-5422265.16	0.0072	0.0001
Mercury	-19559-11-21 05:45 J	-5422177.42	-5422177.26	-5422177.10	0.0072	0.0009
Mercury	-19558-02-17 07:11 J	-5422089.36	-5422089.20	-5422089.04	0.0073	0.0017
Mercury	-19558-05-16 08:23 J	-5422001.29	-5422001.15	-5422000.99	0.0073	0.0026
Mercury	-19558-08-12 09:50 J	-5421913.22	-5421913.09	-5421912.94	0.0073	0.0034
Mercury	-19558-11-08 11:02 J	-5421825.15	-5421825.04	-5421824.89	0.0073	0.0043
Mercury	-19557-02-04 12:43 J	-5421737.07	-5421736.97	-5421736.85	0.0073	0.0051
Mercury	-19557-05-02 14:09 J	-5421648.99	-5421648.91	-5421648.81	0.0073	0.0060
Mercury	-19557-07-29 15:21 J	-5421560.89	-5421560.86	-5421560.78	0.0073	0.0070
Venus	-19490-12-04 01:40 J	-5396962.44	-5396962.43	-5396962.37	0.0080	0.0079
Venus	-19489-07-16 13:26 J	-5396737.16	-5396736.94	-5396736.71	0.0080	0.0007

Venus	-19488-02-26 23:45 J	-5396511.61	-5396511.51	-5396511.35	0.0080	0.0065
Earth	-19482-02-27 05:31 J	-5394320.35	-5394320.27	-5394320.13	0.0076	0.0070
Moon	-19482-02-27 06:00 J	-5394320.32	-5394320.25	-5394320.13	0.0076	0.0071 *
Mercury	-19476-05-29 02:38 J	-5392037.39	-5392037.39	-5392037.39	0.0073	0.0073
Mercury	-19476-08-25 04:04 J	-5391949.40	-5391949.33	-5391949.26	0.0073	0.0064
Mercury	-19476-11-21 05:16 J	-5391861.37	-5391861.28	-5391861.17	0.0073	0.0056
Mercury	-19475-02-17 06:28 J	-5391773.34	-5391773.23	-5391773.10	0.0073	0.0048
Mercury	-19475-05-16 08:09 J	-5391685.29	-5391685.16	-5391685.03	0.0073	0.0039
Mercury	-19475-08-12 09:21 J	-5391597.25	-5391597.11	-5391596.96	0.0072	0.0031
Mercury	-19475-11-08 10:48 J	-5391509.20	-5391509.05	-5391508.90	0.0072	0.0023
Mercury	-19474-02-04 12:14 J	-5391421.15	-5391420.99	-5391420.84	0.0072	0.0014
Mercury	-19474-05-03 13:26 J	-5391333.09	-5391332.94	-5391332.78	0.0072	0.0006
Mercury	-19474-07-30 14:52 J	-5391245.04	-5391244.88	-5391244.73	0.0072	0.0002
Mercury	-19474-10-26 16:04 J	-5391156.98	-5391156.83	-5391156.67	0.0072	0.0010
Mercury	-19473-01-22 17:16 J	-5391068.93	-5391068.78	-5391068.63	0.0072	0.0017
Mercury	-19473-04-19 18:28 J	-5390980.87	-5390980.73	-5390980.58	0.0072	0.0025
Mercury	-19473-07-16 19:55 J	-5390892.81	-5390892.67	-5390892.53	0.0071	0.0033
Mercury	-19473-10-12 20:52 J	-5390804.75	-5390804.63	-5390804.49	0.0071	0.0041
Mercury	-19472-01-08 22:04 J	-5390716.68	-5390716.58	-5390716.46	0.0071	0.0048
Mercury	-19472-04-06 23:31 J	-5390628.61	-5390628.52	-5390628.42	0.0071	0.0056
Mercury	-19472-07-04 00:28 J	-5390540.54	-5390540.48	-5390540.40	0.0071	0.0063
Mercury	-19472-09-30 01:55 J	-5390452.43	-5390452.42	-5390452.40	0.0071	0.0070
Venus	-19331-05-03 02:23 J	-5339102.48	-5339102.40	-5339102.27	0.0064	0.0056
Venus	-19331-12-14 06:14 J	-5338877.43	-5338877.24	-5338877.02	0.0064	0.0021
Venus	-19330-07-27 10:04 J	-5338652.28	-5338652.08	-5338651.86	0.0064	0.0015
Venus	-19329-03-08 13:26 J	-5338427.05	-5338426.94	-5338426.78	0.0065	0.0051
Mars	-19326-07-29 21:07 J	-5337188.92	-5337188.62	-5337188.32	0.0066	0.0026
Earth	-19322-08-24 10:19 J	-5335702.29	-5335702.07	-5335701.80	0.0067	0.0024
Moon	-19322-08-24 11:16 J	-5335702.25	-5335702.03	-5335701.78	0.0067	0.0023 *
Mercury	-19314-10-30 03:21 J	-5332713.39	-5332713.36	-5332713.31	0.0071	0.0069

Mercury	-19313-01-26 04:48 J	-5332625.38	-5332625.30	-5332625.22	0.0071	0.0061
Mercury	-19313-04-23 05:45 J	-5332537.35	-5332537.26	-5332537.14	0.0071	0.0054
Mercury	-19313-07-20 07:11 J	-5332449.31	-5332449.20	-5332449.06	0.0072	0.0046
Mercury	-19313-10-16 08:38 J	-5332361.27	-5332361.14	-5332361.00	0.0072	0.0038
Mercury	-19312-01-12 09:50 J	-5332273.22	-5332273.09	-5332272.93	0.0072	0.0030
Mercury	-19312-04-10 11:16 J	-5332185.17	-5332185.03	-5332184.87	0.0072	0.0022
Mercury	-19312-07-07 12:57 J	-5332097.12	-5332096.96	-5332096.80	0.0072	0.0013
Mercury	-19312-10-03 14:23 J	-5332009.06	-5332008.90	-5332008.74	0.0072	0.0006
Mercury	-19312-12-30 15:36 J	-5331921.01	-5331920.85	-5331920.69	0.0072	0.0003
Mercury	-19311-03-28 17:02 J	-5331832.95	-5331832.79	-5331832.63	0.0072	0.0011
Mercury	-19311-06-24 18:28 J	-5331744.88	-5331744.73	-5331744.57	0.0073	0.0020
Mercury	-19311-09-20 19:55 J	-5331656.82	-5331656.67	-5331656.52	0.0073	0.0028
Mercury	-19311-12-17 21:07 J	-5331568.75	-5331568.62	-5331568.47	0.0073	0.0037
Mercury	-19310-03-15 22:48 J	-5331480.67	-5331480.55	-5331480.42	0.0073	0.0045
Mercury	-19310-06-12 00:00 J	-5331392.59	-5331392.50	-5331392.38	0.0073	0.0054
Mercury	-19310-09-08 01:26 J	-5331304.51	-5331304.44	-5331304.35	0.0073	0.0063
Mercury	-19310-12-05 02:38 J	-5331216.39	-5331216.39	-5331216.34	0.0073	0.0073
Venus	-19242-03-26 20:23 J	-5306632.73	-5306632.65	-5306632.54	0.0080	0.0073
Venus	-19242-11-07 08:09 J	-5306407.39	-5306407.16	-5306406.94	0.0080	0.0001
Venus	-19241-06-19 18:28 J	-5306181.81	-5306181.73	-5306181.60	0.0080	0.0071
Mars	-19239-12-14 15:36 J	-5305274.13	-5305273.85	-5305273.53	0.0078	0.0017
Moon	-19235-02-28 01:40 J	-5304102.65	-5304102.43	-5304102.20	0.0076	0.0035
Earth	-19235-02-28 02:38 J	-5304102.60	-5304102.39	-5304102.15	0.0076	0.0039 *
Mercury	-19229-10-03 13:40 J	-5301692.96	-5301692.93	-5301692.90	0.0073	0.0071
Mercury	-19229-12-30 14:38 J	-5301604.95	-5301604.89	-5301604.80	0.0073	0.0063
Mercury	-19228-03-28 16:04 J	-5301516.92	-5301516.83	-5301516.71	0.0073	0.0055
Mercury	-19228-06-24 17:45 J	-5301428.88	-5301428.76	-5301428.64	0.0073	0.0046
Mercury	-19228-09-20 18:57 J	-5301340.84	-5301340.71	-5301340.57	0.0072	0.0038
Mercury	-19228-12-17 20:23 J	-5301252.79	-5301252.65	-5301252.50	0.0072	0.0029
Mercury	-19227-03-15 21:36 J	-5301164.74	-5301164.60	-5301164.44	0.0072	0.0021



Mercury	-19227-06-11 23:02 J	-5301076.69	-5301076.54	-5301076.38	0.0072	0.0013
Mercury	-19227-09-08 00:28 J	-5300988.64	-5300988.48	-5300988.32	0.0072	0.0005
Mercury	-19227-12-05 01:40 J	-5300900.58	-5300900.43	-5300900.27	0.0072	0.0003
Mercury	-19226-03-03 03:07 J	-5300812.53	-5300812.37	-5300812.22	0.0072	0.0011
Mercury	-19226-05-30 04:19 J	-5300724.47	-5300724.32	-5300724.17	0.0072	0.0019
Mercury	-19226-08-26 05:31 J	-5300636.41	-5300636.27	-5300636.12	0.0071	0.0027
Mercury	-19226-11-22 06:43 J	-5300548.35	-5300548.22	-5300548.08	0.0071	0.0034
Mercury	-19225-02-18 07:40 J	-5300460.29	-5300460.18	-5300460.04	0.0071	0.0043
Mercury	-19225-05-16 09:07 J	-5300372.22	-5300372.12	-5300372.00	0.0071	0.0050
Mercury	-19225-08-12 10:19 J	-5300284.15	-5300284.07	-5300283.97	0.0071	0.0057
Mercury	-19225-11-08 11:45 J	-5300196.07	-5300196.01	-5300195.95	0.0071	0.0064
Venus	-19084-08-23 18:28 J	-5248772.76	-5248772.73	-5248772.67	0.0064	0.0062
Venus	-19083-04-05 22:19 J	-5248547.77	-5248547.57	-5248547.37	0.0064	0.0027
Venus	-19083-11-17 01:55 J	-5248322.63	-5248322.42	-5248322.20	0.0064	0.0008
Venus	-19082-06-30 05:31 J	-5248097.41	-5248097.27	-5248097.09	0.0065	0.0044
Moon	-19075-08-25 03:36 J	-5245484.46	-5245484.35	-5245484.20	0.0067	0.0058
Earth	-19075-08-25 04:04 J	-5245484.42	-5245484.33	-5245484.18	0.0067	0.0060 *
Moon	-19074-08-26 18:43 J	-5245117.93	-5245117.72	-5245117.50	0.0068	0.0040
Earth	-19074-08-26 18:57 J	-5245117.89	-5245117.71	-5245117.48	0.0068	0.0043 *
Mercury	-19066-06-02 14:09 J	-5242280.96	-5242280.91	-5242280.83	0.0071	0.0065
Mercury	-19066-08-29 15:36 J	-5242192.94	-5242192.85	-5242192.75	0.0071	0.0057
Mercury	-19066-11-25 16:48 J	-5242104.90	-5242104.80	-5242104.67	0.0072	0.0049
Mercury	-19065-02-21 18:00 J	-5242016.86	-5242016.75	-5242016.60	0.0072	0.0042
Mercury	-19065-05-19 19:26 J	-5241928.82	-5241928.69	-5241928.54	0.0072	0.0034
Mercury	-19065-08-15 21:07 J	-5241840.77	-5241840.62	-5241840.47	0.0072	0.0025
Mercury	-19065-11-11 22:19 J	-5241752.72	-5241752.57	-5241752.41	0.0072	0.0017
Mercury	-19064-02-07 23:45 J	-5241664.66	-5241664.51	-5241664.35	0.0072	0.0009
Mercury	-19064-05-07 01:11 J	-5241576.61	-5241576.45	-5241576.29	0.0072	0.0001
Mercury	-19064-08-03 02:38 J	-5241488.55	-5241488.39	-5241488.23	0.0072	0.0007
Mercury	-19064-10-30 04:04 J	-5241400.49	-5241400.33	-5241400.18	0.0073	0.0016

Mercury	-19063-01-26 05:16 J	-5241312.42	-5241312.28	-5241312.12	0.0073	0.0024
Mercury	-19063-04-24 06:43 J	-5241224.35	-5241224.22	-5241224.07	0.0073	0.0033
Mercury	-19063-07-21 08:23 J	-5241136.28	-5241136.15	-5241136.02	0.0073	0.0041
Mercury	-19063-10-17 09:36 J	-5241048.21	-5241048.10	-5241047.98	0.0073	0.0050
Mercury	-19062-01-13 10:48 J	-5240960.12	-5240960.05	-5240959.94	0.0073	0.0060
Mercury	-19062-04-11 12:43 J	-5240872.03	-5240871.97	-5240871.91	0.0073	0.0068

# 19TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 19th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-18994-02-27 22:04 J		-5216077.80	-5216077.58	-5216077.35	0.0080	0.0011	
Venus	-18994-10-11 08:38 J		-5215852.27	-5215852.14	-5215851.97	0.0080	0.0060	
Moon	-18988-02-28 15:07 J		-5213885.12	-5213884.87	-5213884.62	0.0077	0.0011	
Earth	-18988-02-28 17:02 J		-5213885.04	-5213884.79	-5213884.52	0.0077	0.0014	*
Mercury	-18981-05-07 00:43 J		-5211260.53	-5211260.47	-5211260.40	0.0073	0.0066	
Mercury	-18981-08-03 01:55 J		-5211172.50	-5211172.42	-5211172.31	0.0073	0.0058	
Mercury	-18981-10-30 03:07 J		-5211084.46	-5211084.37	-5211084.23	0.0073	0.0050	
Mercury	-18980-01-26 04:48 J		-5210996.42	-5210996.30	-5210996.16	0.0072	0.0041	
Mercury	-18980-04-24 06:14 J		-5210908.38	-5210908.24	-5210908.10	0.0072	0.0032	
Mercury	-18980-07-21 07:26 J		-5210820.33	-5210820.19	-5210820.03	0.0072	0.0025	
Mercury	-18980-10-17 08:52 J		-5210732.28	-5210732.13	-5210731.97	0.0072	0.0016	
Mercury	-18979-01-13 10:19 J		-5210644.23	-5210644.07	-5210643.91	0.0072	0.0008	

Mercury	-18979-04-11 11:31 J	-5210556.17	-5210556.02	-5210555.86	0.0072	0.0002
Mercury	-18979-07-08 12:57 J	-5210468.12	-5210467.96	-5210467.81	0.0072	0.0008
Mercury	-18979-10-04 14:09 J	-5210380.06	-5210379.91	-5210379.75	0.0072	0.0016
Mercury	-18979-12-31 15:21 J	-5210292.00	-5210291.86	-5210291.71	0.0071	0.0024
Mercury	-18978-03-29 16:33 J	-5210203.94	-5210203.81	-5210203.66	0.0071	0.0032
Mercury	-18978-06-25 17:45 J	-5210115.88	-5210115.76	-5210115.62	0.0071	0.0039
Mercury	-18978-09-21 18:57 J	-5210027.81	-5210027.71	-5210027.58	0.0071	0.0047
Mercury	-18978-12-18 20:23 J	-5209939.75	-5209939.65	-5209939.55	0.0071	0.0054
Mercury	-18977-03-15 21:21 J	-5209851.67	-5209851.61	-5209851.52	0.0071	0.0062
Mercury	-18977-06-11 22:48 J	-5209763.58	-5209763.55	-5209763.52	0.0071	0.0069
Venus	-18836-07-27 11:45 J	-5158218.17	-5158218.01	-5158217.83	0.0064	0.0040
Venus	-18835-03-09 15:36 J	-5157993.06	-5157992.85	-5157992.63	0.0064	0.0005
Venus	-18835-10-20 18:57 J	-5157767.88	-5157767.71	-5157767.50	0.0064	0.0031
Earth	-18827-08-27 09:36 J	-5154900.36	-5154900.10	-5154899.85	0.0067	0.0006
Moon	-18827-08-27 10:19 J	-5154900.34	-5154900.07	-5154899.80	0.0067	0.0002 *
Mercury	-18818-01-04 00:14 J	-5151848.55	-5151848.49	-5151848.41	0.0071	0.0064
Mercury	-18818-04-02 01:26 J	-5151760.52	-5151760.44	-5151760.33	0.0071	0.0057
Mercury	-18818-06-29 02:52 J	-5151672.49	-5151672.38	-5151672.26	0.0072	0.0049
Mercury	-18818-09-25 04:19 J	-5151584.45	-5151584.32	-5151584.19	0.0072	0.0041
Mercury	-18818-12-22 05:45 J	-5151496.40	-5151496.26	-5151496.12	0.0072	0.0033
Mercury	-18817-03-19 06:57 J	-5151408.35	-5151408.21	-5151408.06	0.0072	0.0025
Mercury	-18817-06-15 08:23 J	-5151320.30	-5151320.15	-5151319.99	0.0072	0.0017
Mercury	-18817-09-11 09:36 J	-5151232.25	-5151232.10	-5151231.93	0.0072	0.0010
Mercury	-18817-12-08 11:02 J	-5151144.19	-5151144.04	-5151143.88	0.0072	0.0002
Mercury	-18816-03-06 12:28 J	-5151056.14	-5151055.98	-5151055.82	0.0072	0.0008
Mercury	-18816-06-02 13:40 J	-5150968.07	-5150967.93	-5150967.76	0.0073	0.0017
Mercury	-18816-08-29 15:07 J	-5150880.01	-5150879.87	-5150879.71	0.0073	0.0025
Mercury	-18816-11-25 16:48 J	-5150791.94	-5150791.80	-5150791.66	0.0073	0.0033
Mercury	-18815-02-21 18:00 J	-5150703.87	-5150703.75	-5150703.61	0.0073	0.0042
Mercury	-18815-05-20 19:40 J	-5150615.79	-5150615.68	-5150615.56	0.0073	0.0050

Mercury	-18815-08-16 20:52 J	-5150527.71	-5150527.63	-5150527.53	0.0073	0.0059
Mercury	-18815-11-12 22:19 J	-5150439.61	-5150439.57	-5150439.50	0.0073	0.0068
Venus	-18747-06-20 06:57 J	-5125748.38	-5125748.21	-5125748.00	0.0080	0.0042
Venus	-18746-01-31 18:28 J	-5125522.94	-5125522.73	-5125522.52	0.0080	0.0029
Mars	-18744-08-12 16:04 J	-5124599.01	-5124598.83	-5124598.61	0.0078	0.0059
Earth	-18740-03-03 00:43 J	-5123300.61	-5123300.47	-5123300.28	0.0076	0.0059
Moon	-18740-03-03 03:36 J	-5123300.51	-5123300.35	-5123300.17	0.0076	0.0058 *
Mercury	-18734-12-09 10:33 J	-5120828.12	-5120828.06	-5120828.00	0.0073	0.0067
Mercury	-18733-03-06 11:31 J	-5120740.10	-5120740.02	-5120739.91	0.0073	0.0059
Mercury	-18733-06-02 12:57 J	-5120652.06	-5120651.96	-5120651.83	0.0073	0.0050
Mercury	-18733-08-29 14:23 J	-5120564.02	-5120563.90	-5120563.76	0.0072	0.0042
Mercury	-18733-11-25 15:50 J	-5120475.97	-5120475.84	-5120475.69	0.0072	0.0033
Mercury	-18732-02-21 17:02 J	-5120387.93	-5120387.79	-5120387.63	0.0072	0.0026
Mercury	-18732-05-20 18:28 J	-5120299.88	-5120299.73	-5120299.57	0.0072	0.0017
Mercury	-18732-08-16 19:55 J	-5120211.82	-5120211.67	-5120211.51	0.0072	0.0009
Mercury	-18732-11-12 21:21 J	-5120123.77	-5120123.61	-5120123.46	0.0072	0.0002
Mercury	-18731-02-08 22:33 J	-5120035.72	-5120035.56	-5120035.40	0.0072	0.0008
Mercury	-18731-05-07 23:45 J	-5119947.66	-5119947.51	-5119947.35	0.0072	0.0016
Mercury	-18731-08-04 00:57 J	-5119859.60	-5119859.46	-5119859.31	0.0071	0.0023
Mercury	-18731-10-31 02:09 J	-5119771.54	-5119771.41	-5119771.26	0.0071	0.0031
Mercury	-18730-01-27 03:36 J	-5119683.48	-5119683.35	-5119683.22	0.0071	0.0039
Mercury	-18730-04-25 04:48 J	-5119595.41	-5119595.30	-5119595.18	0.0071	0.0046
Mercury	-18730-07-22 05:45 J	-5119507.35	-5119507.26	-5119507.15	0.0071	0.0054
Mercury	-18730-10-18 07:11 J	-5119419.27	-5119419.20	-5119419.12	0.0071	0.0061
Mercury	-18729-01-14 08:09 J	-5119331.18	-5119331.16	-5119331.11	0.0071	0.0069
Venus	-18589-11-16 22:19 J	-5067888.59	-5067888.57	-5067888.54	0.0064	0.0063
Venus	-18588-06-30 01:40 J	-5067663.60	-5067663.43	-5067663.21	0.0064	0.0029
Venus	-18587-02-10 05:45 J	-5067438.47	-5067438.26	-5067438.04	0.0064	0.0006
Venus	-18587-09-23 09:21 J	-5067213.26	-5067213.11	-5067212.94	0.0064	0.0042
Mars	-18583-07-06 04:19 J	-5065831.64	-5065831.32	-5065830.98	0.0066	0.0004

Earth	-18579-08-29 07:40 J	-5064316.39	-5064316.18	-5064315.92	0.0068	0.0030
Moon	-18579-08-29 08:23 J	-5064316.36	-5064316.15	-5064315.91	0.0068	0.0030 *
Mercury	-18571-08-07 08:52 J	-5061416.16	-5061416.13	-5061416.10	0.0071	0.0070
Mercury	-18571-11-03 09:36 J	-5061328.15	-5061328.10	-5061328.00	0.0071	0.0063
Mercury	-18570-01-30 11:02 J	-5061240.12	-5061240.04	-5061239.92	0.0071	0.0055
Mercury	-18570-04-28 12:28 J	-5061152.09	-5061151.98	-5061151.85	0.0072	0.0047
Mercury	-18570-07-25 13:40 J	-5061064.05	-5061063.93	-5061063.78	0.0072	0.0039
Mercury	-18570-10-21 15:07 J	-5060976.00	-5060975.87	-5060975.72	0.0072	0.0031
Mercury	-18569-01-17 16:33 J	-5060887.95	-5060887.81	-5060887.65	0.0072	0.0023
Mercury	-18569-04-14 18:00 J	-5060799.90	-5060799.75	-5060799.59	0.0072	0.0015
Mercury	-18569-07-11 19:26 J	-5060711.85	-5060711.69	-5060711.53	0.0072	0.0006
Mercury	-18569-10-07 20:52 J	-5060623.79	-5060623.63	-5060623.47	0.0072	0.0002
Mercury	-18568-01-03 22:04 J	-5060535.73	-5060535.58	-5060535.42	0.0072	0.0010
Mercury	-18568-04-01 23:31 J	-5060447.67	-5060447.52	-5060447.36	0.0073	0.0019
Mercury	-18568-06-29 00:43 J	-5060359.61	-5060359.47	-5060359.31	0.0073	0.0028
Mercury	-18568-09-25 02:09 J	-5060271.54	-5060271.41	-5060271.26	0.0073	0.0036
Mercury	-18568-12-22 03:21 J	-5060183.47	-5060183.36	-5060183.21	0.0073	0.0045
Mercury	-18567-03-20 05:02 J	-5060095.39	-5060095.29	-5060095.17	0.0073	0.0053
Mercury	-18567-06-16 06:28 J	-5060007.30	-5060007.23	-5060007.13	0.0073	0.0062
Mercury	-18567-09-12 07:40 J	-5059919.19	-5059919.18	-5059919.12	0.0073	0.0072
Venus	-18499-05-23 22:48 J	-5035193.76	-5035193.55	-5035193.32	0.0080	0.0019
Venus	-18498-01-04 09:50 J	-5034968.25	-5034968.09	-5034967.91	0.0080	0.0052
Mars	-18496-11-21 23:31 J	-5033915.70	-5033915.52	-5033915.28	0.0078	0.0056
Earth	-18493-03-03 01:26 J	-5033083.64	-5033083.44	-5033083.21	0.0077	0.0042
Moon	-18493-03-03 04:48 J	-5033083.52	-5033083.30	-5033083.06	0.0077	0.0038 *
Mercury	-18486-10-08 19:55 J	-5030307.72	-5030307.67	-5030307.58	0.0073	0.0065
Mercury	-18485-01-04 21:36 J	-5030219.70	-5030219.60	-5030219.50	0.0073	0.0056
Mercury	-18485-04-01 22:48 J	-5030131.66	-5030131.55	-5030131.42	0.0072	0.0048
Mercury	-18485-06-29 00:14 J	-5030043.61	-5030043.49	-5030043.35	0.0072	0.0039
Mercury	-18485-09-25 01:40 J	-5029955.57	-5029955.43	-5029955.28	0.0072	0.0031

Mercury	-18485-12-22 03:07 J	-5029867.52	-5029867.37	-5029867.22	0.0072	0.0022
Mercury	-18484-03-20 04:19 J	-5029779.47	-5029779.32	-5029779.16	0.0072	0.0014
Mercury	-18484-06-16 05:45 J	-5029691.42	-5029691.26	-5029691.10	0.0072	0.0006
Mercury	-18484-09-12 07:11 J	-5029603.36	-5029603.20	-5029603.05	0.0072	0.0003
Mercury	-18484-12-09 08:23 J	-5029515.31	-5029515.15	-5029514.99	0.0072	0.0010
Mercury	-18483-03-07 09:21 J	-5029427.25	-5029427.11	-5029426.95	0.0072	0.0019
Mercury	-18483-06-03 10:33 J	-5029339.19	-5029339.06	-5029338.90	0.0071	0.0027
Mercury	-18483-08-30 12:14 J	-5029251.13	-5029250.99	-5029250.85	0.0071	0.0034
Mercury	-18483-11-26 13:11 J	-5029163.07	-5029162.95	-5029162.81	0.0071	0.0042
Mercury	-18482-02-22 14:23 J	-5029075.00	-5029074.90	-5029074.78	0.0071	0.0049
Mercury	-18482-05-21 15:21 J	-5028986.93	-5028986.86	-5028986.75	0.0071	0.0057
Mercury	-18482-08-17 16:48 J	-5028898.85	-5028898.80	-5028898.72	0.0071	0.0064
Venus	-18341-10-20 10:33 J	-4977334.14	-4977334.06	-4977333.95	0.0064	0.0057
Venus	-18340-06-02 14:38 J	-4977109.09	-4977108.89	-4977108.68	0.0064	0.0022
Venus	-18339-01-13 18:14 J	-4976883.95	-4976883.74	-4976883.52	0.0064	0.0013
Venus	-18339-08-26 21:21 J	-4976658.72	-4976658.61	-4976658.44	0.0064	0.0049
Mars	-18335-10-14 13:11 J	-4975149.10	-4975148.95	-4975148.76	0.0066	0.0056
Moon	-18332-08-29 12:00 J	-4974099.18	-4974099.00	-4974098.80	0.0067	0.0044
Earth	-18332-08-29 12:14 J	-4974099.14	-4974098.99	-4974098.77	0.0067	0.0047 *
Moon	-18331-08-31 02:38 J	-4973732.53	-4973732.39	-4973732.20	0.0068	0.0053
Earth	-18331-08-31 03:21 J	-4973732.48	-4973732.36	-4973732.20	0.0068	0.0056 *
Mercury	-18323-06-06 17:45 J	-4970895.77	-4970895.76	-4970895.74	0.0071	0.0071
Mercury	-18323-09-02 18:43 J	-4970807.78	-4970807.72	-4970807.63	0.0071	0.0063
Mercury	-18323-11-29 19:55 J	-4970719.75	-4970719.67	-4970719.55	0.0071	0.0056
Mercury	-18322-02-25 21:21 J	-4970631.72	-4970631.61	-4970631.48	0.0072	0.0048
Mercury	-18322-05-24 22:33 J	-4970543.68	-4970543.56	-4970543.41	0.0072	0.0040
Mercury	-18322-08-21 00:00 J	-4970455.63	-4970455.50	-4970455.35	0.0072	0.0032
Mercury	-18322-11-17 01:26 J	-4970367.58	-4970367.44	-4970367.28	0.0072	0.0024
Mercury	-18321-02-13 02:52 J	-4970279.53	-4970279.38	-4970279.22	0.0072	0.0015
Mercury	-18321-05-11 04:19 J	-4970191.48	-4970191.32	-4970191.16	0.0072	0.0007

Mercury	-18321-08-07 05:31 J	-4970103.42	-4970103.27	-4970103.11	0.0072	0.0003
Mercury	-18321-11-03 06:57 J	-4970015.36	-4970015.21	-4970015.05	0.0072	0.0009
Mercury	-18320-01-30 08:23 J	-4969927.30	-4969927.15	-4969926.99	0.0073	0.0018
Mercury	-18320-04-28 09:36 J	-4969839.24	-4969839.10	-4969838.94	0.0073	0.0027
Mercury	-18320-07-25 11:02 J	-4969751.17	-4969751.04	-4969750.89	0.0073	0.0035
Mercury	-18320-10-21 12:14 J	-4969663.10	-4969662.99	-4969662.84	0.0073	0.0044
Mercury	-18319-01-17 13:55 J	-4969575.02	-4969574.92	-4969574.80	0.0073	0.0052
Mercury	-18319-04-15 15:21 J	-4969486.94	-4969486.86	-4969486.76	0.0073	0.0061
Mercury	-18319-07-12 16:33 J	-4969398.83	-4969398.81	-4969398.75	0.0073	0.0071
Venus	-18251-04-26 10:19 J	-4944639.29	-4944639.07	-4944638.84	0.0080	0.0013
Venus	-18251-12-07 21:07 J	-4944413.75	-4944413.62	-4944413.44	0.0080	0.0058
Moon	-18245-03-04 19:26 J	-4942499.94	-4942499.69	-4942499.44	0.0077	0.0012
Earth	-18245-03-04 21:21 J	-4942499.86	-4942499.61	-4942499.35	0.0077	0.0014 *
Mercury	-18238-08-08 04:19 J	-4939787.36	-4939787.32	-4939787.25	0.0073	0.0068
Mercury	-18238-11-04 06:00 J	-4939699.34	-4939699.25	-4939699.15	0.0073	0.0059
Mercury	-18237-01-31 07:11 J	-4939611.30	-4939611.20	-4939611.07	0.0072	0.0051
Mercury	-18237-04-28 08:52 J	-4939523.26	-4939523.13	-4939523.00	0.0072	0.0042
Mercury	-18237-07-25 10:04 J	-4939435.21	-4939435.08	-4939434.93	0.0072	0.0034
Mercury	-18237-10-21 11:31 J	-4939347.16	-4939347.02	-4939346.87	0.0072	0.0025
Mercury	-18236-01-17 12:43 J	-4939259.11	-4939258.97	-4939258.81	0.0072	0.0017
Mercury	-18236-04-15 14:09 J	-4939171.06	-4939170.91	-4939170.75	0.0072	0.0009
Mercury	-18236-07-12 15:36 J	-4939083.01	-4939082.85	-4939082.69	0.0072	0.0000
Mercury	-18236-10-08 16:48 J	-4938994.95	-4938994.80	-4938994.64	0.0072	0.0008
Mercury	-18235-01-04 18:00 J	-4938906.90	-4938906.75	-4938906.59	0.0072	0.0016
Mercury	-18235-04-02 19:26 J	-4938818.84	-4938818.69	-4938818.54	0.0071	0.0024
Mercury	-18235-06-29 20:38 J	-4938730.78	-4938730.64	-4938730.50	0.0071	0.0031
Mercury	-18235-09-25 21:50 J	-4938642.71	-4938642.59	-4938642.45	0.0071	0.0039
Mercury	-18235-12-22 22:48 J	-4938554.65	-4938554.55	-4938554.42	0.0071	0.0047
Mercury	-18234-03-21 00:28 J	-4938466.58	-4938466.48	-4938466.38	0.0071	0.0054
Mercury	-18234-06-17 01:26 J	-4938378.50	-4938378.44	-4938378.36	0.0071	0.0062

Mercury	-18234-09-13 02:23 J	-4938290.41	-4938290.40	-4938290.35	0.0071	0.0070
Venus	-18093-09-22 20:38 J	-4886779.71	-4886779.64	-4886779.53	0.0064	0.0058
Venus	-18092-05-06 00:14 J	-4886554.67	-4886554.49	-4886554.27	0.0064	0.0024
Venus	-18092-12-17 04:19 J	-4886329.53	-4886329.32	-4886329.10	0.0064	0.0012
Venus	-18091-07-30 07:55 J	-4886104.30	-4886104.17	-4886104.01	0.0064	0.0047
Moon	-18084-08-31 05:02 J	-4883515.52	-4883515.29	-4883515.03	0.0067	0.0029
Earth	-18084-08-31 04:48 J	-4883515.51	-4883515.30	-4883515.06	0.0067	0.0032 *
Moon	-18083-09-01 21:50 J	-4883148.59	-4883148.59	-4883148.59	0.0068	0.0068
Mercury	-18075-07-03 02:52 J	-4880287.42	-4880287.38	-4880287.32	0.0071	0.0068
Mercury	-18075-09-29 04:19 J	-4880199.40	-4880199.32	-4880199.23	0.0071	0.0060
Mercury	-18075-12-26 05:31 J	-4880111.37	-4880111.27	-4880111.16	0.0072	0.0052
Mercury	-18074-03-24 06:57 J	-4880023.33	-4880023.21	-4880023.09	0.0072	0.0044
Mercury	-18074-06-20 08:09 J	-4879935.29	-4879935.16	-4879935.02	0.0072	0.0036
Mercury	-18074-09-16 09:21 J	-4879847.25	-4879847.11	-4879846.96	0.0072	0.0028
Mercury	-18074-12-13 10:48 J	-4879759.20	-4879759.05	-4879758.90	0.0072	0.0020
Mercury	-18073-03-10 12:00 J	-4879671.15	-4879671.00	-4879670.84	0.0072	0.0012
Mercury	-18073-06-06 13:26 J	-4879583.09	-4879582.94	-4879582.78	0.0072	0.0004
Mercury	-18073-09-02 14:52 J	-4879495.04	-4879494.88	-4879494.72	0.0072	0.0005
Mercury	-18073-11-29 16:04 J	-4879406.98	-4879406.83	-4879406.67	0.0072	0.0014
Mercury	-18072-02-25 17:31 J	-4879318.92	-4879318.77	-4879318.61	0.0073	0.0022
Mercury	-18072-05-24 18:43 J	-4879230.85	-4879230.72	-4879230.56	0.0073	0.0031
Mercury	-18072-08-20 20:23 J	-4879142.78	-4879142.65	-4879142.51	0.0073	0.0039
Mercury	-18072-11-16 21:36 J	-4879054.71	-4879054.60	-4879054.47	0.0073	0.0048
Mercury	-18071-02-12 23:16 J	-4878966.63	-4878966.53	-4878966.43	0.0073	0.0056
Mercury	-18071-05-12 00:28 J	-4878878.53	-4878878.48	-4878878.40	0.0073	0.0066
Venus	-18003-03-29 19:55 J	-4854084.89	-4854084.67	-4854084.45	0.0080	0.0015
Venus	-18003-11-10 06:43 J	-4853859.37	-4853859.22	-4853859.05	0.0080	0.0055

# 18TH MILLENNIUM BCE



**This is a list of transits visible from Pluto in the 18th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	-17997-03-06 13:55 J		-4851916.18	-4851915.92	-4851915.66	0.0077	0.0005	
Moon	-17997-03-06 15:50 J		-4851916.11	-4851915.84	-4851915.57	0.0077	0.0003	*
Mercury	-17990-09-03 13:26 J		-4849178.99	-4849178.94	-4849178.85	0.0073	0.0065	
Mercury	-17990-11-30 15:07 J		-4849090.96	-4849090.87	-4849090.76	0.0073	0.0056	
Mercury	-17989-02-26 16:19 J		-4849002.92	-4849002.82	-4849002.68	0.0072	0.0047	
Mercury	-17989-05-24 18:00 J		-4848914.88	-4848914.75	-4848914.61	0.0072	0.0038	
Mercury	-17989-08-20 19:11 J		-4848826.83	-4848826.70	-4848826.55	0.0072	0.0030	
Mercury	-17989-11-16 20:38 J		-4848738.78	-4848738.64	-4848738.48	0.0072	0.0022	
Mercury	-17988-02-12 22:04 J		-4848650.73	-4848650.58	-4848650.42	0.0072	0.0013	
Mercury	-17988-05-11 23:31 J		-4848562.68	-4848562.52	-4848562.36	0.0072	0.0005	
Mercury	-17988-08-08 00:43 J		-4848474.63	-4848474.47	-4848474.31	0.0072	0.0003	
Mercury	-17988-11-04 01:55 J		-4848386.57	-4848386.42	-4848386.26	0.0072	0.0011	
Mercury	-17987-01-31 03:07 J		-4848298.51	-4848298.37	-4848298.21	0.0071	0.0020	
Mercury	-17987-04-29 04:19 J		-4848210.45	-4848210.32	-4848210.16	0.0071	0.0028	
Mercury	-17987-07-26 05:31 J		-4848122.39	-4848122.27	-4848122.12	0.0071	0.0035	
Mercury	-17987-10-22 07:11 J		-4848034.33	-4848034.20	-4848034.08	0.0071	0.0042	
Mercury	-17986-01-18 08:09 J		-4847946.26	-4847946.16	-4847946.04	0.0071	0.0050	
Mercury	-17986-04-16 09:21 J		-4847858.19	-4847858.11	-4847858.01	0.0071	0.0058	
Mercury	-17986-07-13 10:48 J		-4847770.11	-4847770.05	-4847769.99	0.0071	0.0065	
Venus	-17845-08-26 05:31 J		-4796225.28	-4796225.27	-4796225.19	0.0064	0.0063	
Venus	-17844-04-08 09:50 J		-4796000.28	-4796000.09	-4795999.89	0.0064	0.0028	
Venus	-17844-11-19 13:40 J		-4795775.14	-4795774.93	-4795774.71	0.0064	0.0007	

Venus	-17843-07-02 17:31 J	-4795549.93	-4795549.77	-4795549.60	0.0064	0.0042
Earth	-17836-09-01 18:43 J	-4792931.94	-4792931.72	-4792931.46	0.0067	0.0025
Moon	-17836-09-01 20:09 J	-4792931.88	-4792931.66	-4792931.42	0.0067	0.0026 *
Mercury	-17827-07-29 11:31 J	-4789679.06	-4789679.02	-4789678.95	0.0071	0.0066
Mercury	-17827-10-25 12:43 J	-4789591.04	-4789590.97	-4789590.87	0.0071	0.0059
Mercury	-17826-01-21 14:09 J	-4789503.01	-4789502.91	-4789502.79	0.0072	0.0051
Mercury	-17826-04-19 15:21 J	-4789414.97	-4789414.86	-4789414.72	0.0072	0.0043
Mercury	-17826-07-16 16:48 J	-4789326.93	-4789326.80	-4789326.66	0.0072	0.0035
Mercury	-17826-10-12 18:00 J	-4789238.88	-4789238.75	-4789238.59	0.0072	0.0027
Mercury	-17825-01-08 19:26 J	-4789150.84	-4789150.69	-4789150.53	0.0072	0.0019
Mercury	-17825-04-05 20:52 J	-4789062.79	-4789062.63	-4789062.47	0.0072	0.0010
Mercury	-17825-07-02 22:19 J	-4788974.73	-4788974.57	-4788974.41	0.0072	0.0002
Mercury	-17825-09-28 23:31 J	-4788886.67	-4788886.52	-4788886.36	0.0072	0.0007
Mercury	-17825-12-26 00:57 J	-4788798.61	-4788798.46	-4788798.30	0.0072	0.0015
Mercury	-17824-03-24 02:09 J	-4788710.55	-4788710.41	-4788710.25	0.0073	0.0024
Mercury	-17824-06-20 03:36 J	-4788622.49	-4788622.35	-4788622.20	0.0073	0.0032
Mercury	-17824-09-16 04:48 J	-4788534.42	-4788534.30	-4788534.15	0.0073	0.0041
Mercury	-17824-12-13 06:28 J	-4788446.34	-4788446.23	-4788446.11	0.0073	0.0049
Mercury	-17823-03-11 07:40 J	-4788358.26	-4788358.18	-4788358.07	0.0073	0.0058
Mercury	-17823-06-07 09:07 J	-4788270.17	-4788270.12	-4788270.04	0.0073	0.0067
Venus	-17755-03-02 01:55 J	-4763530.62	-4763530.42	-4763530.20	0.0080	0.0030
Venus	-17755-10-13 12:57 J	-4763305.14	-4763304.96	-4763304.76	0.0080	0.0041
Moon	-17749-03-08 01:40 J	-4761332.68	-4761332.43	-4761332.18	0.0077	0.0003
Earth	-17749-03-08 02:09 J	-4761332.67	-4761332.41	-4761332.15	0.0077	0.0007 *
Mercury	-17742-09-29 21:50 J	-4758570.64	-4758570.59	-4758570.50	0.0073	0.0065
Mercury	-17742-12-26 23:16 J	-4758482.61	-4758482.53	-4758482.42	0.0072	0.0056
Mercury	-17741-03-24 00:43 J	-4758394.58	-4758394.47	-4758394.34	0.0072	0.0048
Mercury	-17741-06-20 02:09 J	-4758306.53	-4758306.41	-4758306.27	0.0072	0.0039
Mercury	-17741-09-16 03:50 J	-4758218.49	-4758218.34	-4758218.20	0.0072	0.0030
Mercury	-17741-12-13 05:02 J	-4758130.44	-4758130.29	-4758130.13	0.0072	0.0022

Mercury	-17740-03-11 06:28 J	-4758042.39	-4758042.23	-4758042.07	0.0072	0.0014
Mercury	-17740-06-07 07:40 J	-4757954.33	-4757954.18	-4757954.02	0.0072	0.0006
Mercury	-17740-09-03 09:07 J	-4757866.28	-4757866.12	-4757865.96	0.0072	0.0003
Mercury	-17740-11-30 10:19 J	-4757778.22	-4757778.07	-4757777.91	0.0072	0.0011
Mercury	-17739-02-26 11:45 J	-4757690.16	-4757690.01	-4757689.86	0.0071	0.0019
Mercury	-17739-05-25 12:57 J	-4757602.10	-4757601.96	-4757601.81	0.0071	0.0027
Mercury	-17739-08-21 14:09 J	-4757514.04	-4757513.91	-4757513.77	0.0071	0.0035
Mercury	-17739-11-17 15:21 J	-4757425.98	-4757425.86	-4757425.73	0.0071	0.0042
Mercury	-17738-02-13 16:33 J	-4757337.91	-4757337.81	-4757337.69	0.0071	0.0050
Mercury	-17738-05-12 17:31 J	-4757249.84	-4757249.77	-4757249.66	0.0071	0.0058
Mercury	-17738-08-08 19:11 J	-4757161.76	-4757161.70	-4757161.64	0.0071	0.0065
Venus	-17596-03-11 17:02 J	-4705445.94	-4705445.79	-4705445.59	0.0064	0.0038
Venus	-17596-10-22 21:21 J	-4705220.83	-4705220.61	-4705220.40	0.0064	0.0004
Venus	-17595-06-05 00:57 J	-4704995.64	-4704995.46	-4704995.26	0.0064	0.0032
Moon	-17588-09-03 04:19 J	-4702348.54	-4702348.32	-4702348.05	0.0067	0.0029
Earth	-17588-09-03 06:00 J	-4702348.47	-4702348.25	-4702347.99	0.0067	0.0025 *
Mercury	-17579-08-24 19:40 J	-4699070.71	-4699070.68	-4699070.62	0.0071	0.0068
Mercury	-17579-11-20 21:07 J	-4698982.70	-4698982.62	-4698982.53	0.0071	0.0060
Mercury	-17578-02-16 22:19 J	-4698894.67	-4698894.57	-4698894.45	0.0072	0.0052
Mercury	-17578-05-15 23:45 J	-4698806.63	-4698806.51	-4698806.38	0.0072	0.0044
Mercury	-17578-08-12 00:57 J	-4698718.59	-4698718.46	-4698718.32	0.0072	0.0036
Mercury	-17578-11-08 02:09 J	-4698630.54	-4698630.41	-4698630.25	0.0072	0.0028
Mercury	-17577-02-04 03:36 J	-4698542.50	-4698542.35	-4698542.19	0.0072	0.0020
Mercury	-17577-05-02 05:02 J	-4698454.44	-4698454.29	-4698454.13	0.0072	0.0012
Mercury	-17577-07-29 06:28 J	-4698366.39	-4698366.23	-4698366.07	0.0072	0.0003
Mercury	-17577-10-25 07:40 J	-4698278.33	-4698278.18	-4698278.02	0.0072	0.0005
Mercury	-17576-01-21 09:07 J	-4698190.28	-4698190.12	-4698189.96	0.0073	0.0014
Mercury	-17576-04-19 10:19 J	-4698102.21	-4698102.07	-4698101.91	0.0073	0.0022
Mercury	-17576-07-16 11:45 J	-4698014.15	-4698014.01	-4698013.86	0.0073	0.0031
Mercury	-17576-10-12 12:57 J	-4697926.08	-4697925.96	-4697925.81	0.0073	0.0040

Mercury	-17575-01-08 14:38 J	-4697838.01	-4697837.89	-4697837.77	0.0073	0.0048
Mercury	-17575-04-06 15:50 J	-4697749.93	-4697749.84	-4697749.73	0.0073	0.0057
Mercury	-17575-07-03 17:16 J	-4697661.83	-4697661.78	-4697661.70	0.0073	0.0066
Venus	-17507-02-02 07:26 J	-4672976.35	-4672976.19	-4672975.99	0.0080	0.0047
Venus	-17507-09-15 18:43 J	-4672750.92	-4672750.72	-4672750.50	0.0080	0.0024
Moon	-17501-03-09 12:57 J	-4670749.23	-4670748.96	-4670748.69	0.0077	0.0007
Earth	-17501-03-09 13:11 J	-4670749.20	-4670748.95	-4670748.68	0.0077	0.0006 *
Mercury	-17494-10-26 06:00 J	-4667962.30	-4667962.25	-4667962.17	0.0073	0.0066
Mercury	-17493-01-22 07:11 J	-4667874.28	-4667874.20	-4667874.08	0.0072	0.0058
Mercury	-17493-04-19 08:52 J	-4667786.24	-4667786.13	-4667786.00	0.0072	0.0049
Mercury	-17493-07-16 10:04 J	-4667698.20	-4667698.08	-4667697.93	0.0072	0.0040
Mercury	-17493-10-12 11:45 J	-4667610.15	-4667610.01	-4667609.86	0.0072	0.0031
Mercury	-17492-01-08 12:57 J	-4667522.10	-4667521.96	-4667521.80	0.0072	0.0023
Mercury	-17492-04-06 14:23 J	-4667434.05	-4667433.90	-4667433.74	0.0072	0.0015
Mercury	-17492-07-03 15:50 J	-4667346.00	-4667345.84	-4667345.68	0.0072	0.0006
Mercury	-17492-09-29 17:16 J	-4667257.94	-4667257.78	-4667257.62	0.0072	0.0002
Mercury	-17492-12-26 18:28 J	-4667169.88	-4667169.73	-4667169.57	0.0071	0.0010
Mercury	-17491-03-24 19:40 J	-4667081.83	-4667081.68	-4667081.52	0.0071	0.0018
Mercury	-17491-06-20 20:52 J	-4666993.77	-4666993.63	-4666993.47	0.0071	0.0026
Mercury	-17491-09-16 22:04 J	-4666905.71	-4666905.58	-4666905.43	0.0071	0.0034
Mercury	-17491-12-13 23:16 J	-4666817.64	-4666817.53	-4666817.39	0.0071	0.0042
Mercury	-17490-03-12 00:43 J	-4666729.57	-4666729.47	-4666729.35	0.0071	0.0049
Mercury	-17490-06-08 01:55 J	-4666641.50	-4666641.42	-4666641.32	0.0071	0.0057
Mercury	-17490-09-04 02:52 J	-4666553.42	-4666553.38	-4666553.30	0.0071	0.0065
Venus	-17348-02-11 23:31 J	-4614891.62	-4614891.52	-4614891.36	0.0064	0.0052
Venus	-17348-09-25 03:36 J	-4614666.55	-4614666.35	-4614666.13	0.0064	0.0017
Venus	-17347-05-08 07:11 J	-4614441.39	-4614441.20	-4614440.98	0.0064	0.0018
Venus	-17347-12-19 10:48 J	-4614216.15	-4614216.05	-4614215.90	0.0064	0.0054
Earth	-17340-09-04 15:21 J	-4611765.07	-4611764.86	-4611764.62	0.0067	0.0032
Moon	-17340-09-04 18:28 J	-4611764.94	-4611764.73	-4611764.50	0.0067	0.0032 *

Mercury	-17331-09-20 03:21 J	-4608462.36	-4608462.36	-4608462.35	0.0071	0.0071
Mercury	-17331-12-17 04:19 J	-4608374.37	-4608374.32	-4608374.23	0.0071	0.0064
Mercury	-17330-03-15 05:45 J	-4608286.35	-4608286.26	-4608286.15	0.0071	0.0056
Mercury	-17330-06-11 06:57 J	-4608198.31	-4608198.21	-4608198.08	0.0072	0.0048
Mercury	-17330-09-07 08:09 J	-4608110.27	-4608110.16	-4608110.01	0.0072	0.0040
Mercury	-17330-12-04 09:36 J	-4608022.23	-4608022.10	-4608021.95	0.0072	0.0032
Mercury	-17329-03-01 10:48 J	-4607934.18	-4607934.05	-4607933.89	0.0072	0.0024
Mercury	-17329-05-28 12:28 J	-4607846.13	-4607845.98	-4607845.83	0.0072	0.0015
Mercury	-17329-08-24 13:40 J	-4607758.08	-4607757.93	-4607757.77	0.0072	0.0007
Mercury	-17329-11-20 15:07 J	-4607670.03	-4607669.87	-4607669.71	0.0072	0.0002
Mercury	-17328-02-16 16:33 J	-4607581.97	-4607581.81	-4607581.66	0.0072	0.0010
Mercury	-17328-05-15 17:45 J	-4607493.91	-4607493.76	-4607493.60	0.0073	0.0018
Mercury	-17328-08-11 19:11 J	-4607405.85	-4607405.70	-4607405.55	0.0073	0.0027
Mercury	-17328-11-07 20:23 J	-4607317.78	-4607317.65	-4607317.50	0.0073	0.0036
Mercury	-17327-02-03 21:36 J	-4607229.71	-4607229.60	-4607229.46	0.0073	0.0045
Mercury	-17327-05-02 23:16 J	-4607141.63	-4607141.53	-4607141.42	0.0073	0.0053
Mercury	-17327-07-30 00:28 J	-4607053.55	-4607053.48	-4607053.38	0.0073	0.0063
Mercury	-17327-10-26 01:55 J	-4606965.44	-4606965.42	-4606965.37	0.0073	0.0072
Venus	-17259-01-05 09:50 J	-4582422.13	-4582422.09	-4582422.03	0.0080	0.0078
Venus	-17259-08-18 21:07 J	-4582196.84	-4582196.62	-4582196.39	0.0080	0.0007
Venus	-17258-04-01 07:26 J	-4581971.30	-4581971.19	-4581971.02	0.0079	0.0063
Earth	-17253-03-10 19:11 J	-4580165.95	-4580165.70	-4580165.44	0.0077	0.0013
Moon	-17253-03-10 20:38 J	-4580165.89	-4580165.64	-4580165.38	0.0077	0.0009 *
Mercury	-17246-11-21 12:43 J	-4577353.97	-4577353.97	-4577353.92	0.0073	0.0072
Mercury	-17245-02-17 14:23 J	-4577265.97	-4577265.90	-4577265.81	0.0072	0.0063
Mercury	-17245-05-15 16:04 J	-4577177.93	-4577177.83	-4577177.72	0.0072	0.0054
Mercury	-17245-08-11 17:16 J	-4577089.89	-4577089.78	-4577089.65	0.0072	0.0045
Mercury	-17245-11-07 18:57 J	-4577001.85	-4577001.71	-4577001.58	0.0072	0.0037
Mercury	-17244-02-03 20:09 J	-4576913.80	-4576913.66	-4576913.51	0.0072	0.0028
Mercury	-17244-05-02 21:36 J	-4576825.75	-4576825.60	-4576825.44	0.0072	0.0020

Mercury	-17244-07-29 22:48 J	-4576737.70	-4576737.55	-4576737.38	0.0072	0.0012
Mercury	-17244-10-26 00:14 J	-4576649.64	-4576649.49	-4576649.33	0.0072	0.0004
Mercury	-17243-01-22 01:40 J	-4576561.59	-4576561.43	-4576561.27	0.0072	0.0005
Mercury	-17243-04-20 02:52 J	-4576473.53	-4576473.38	-4576473.22	0.0071	0.0013
Mercury	-17243-07-17 04:04 J	-4576385.47	-4576385.33	-4576385.17	0.0071	0.0021
Mercury	-17243-10-13 05:16 J	-4576297.41	-4576297.28	-4576297.12	0.0071	0.0029
Mercury	-17242-01-09 06:28 J	-4576209.35	-4576209.23	-4576209.08	0.0071	0.0037
Mercury	-17242-04-07 07:40 J	-4576121.28	-4576121.18	-4576121.04	0.0071	0.0045
Mercury	-17242-07-04 08:52 J	-4576033.21	-4576033.13	-4576033.01	0.0071	0.0053
Mercury	-17242-09-30 10:33 J	-4575945.14	-4575945.06	-4575944.98	0.0071	0.0060
Mercury	-17242-12-27 11:31 J	-4575857.05	-4575857.02	-4575856.97	0.0071	0.0068
Venus	-17100-08-28 08:38 J	-4524112.31	-4524112.14	-4524111.95	0.0064	0.0035
Venus	-17099-04-10 12:43 J	-4523887.19	-4523886.97	-4523886.76	0.0064	0.0001
Venus	-17099-11-21 16:04 J	-4523662.00	-4523661.83	-4523661.63	0.0064	0.0035
Jupiter	-17097-09-20 10:04 J	-4522993.58	-4522993.08	-4522992.53	0.0065	0.0021
Moon	-17092-09-05 19:11 J	-4521181.88	-4521181.70	-4521181.49	0.0067	0.0043
Earth	-17092-09-05 22:33 J	-4521181.74	-4521181.56	-4521181.37	0.0067	0.0047 *
Earth	-17091-09-07 12:28 J	-4520815.10	-4520814.98	-4520814.81	0.0067	0.0056
Moon	-17091-09-07 16:48 J	-4520814.96	-4520814.80	-4520814.64	0.0067	0.0052 *
Mercury	-17082-01-12 11:16 J	-4517766.05	-4517766.03	-4517765.98	0.0071	0.0069
Mercury	-17082-04-10 12:28 J	-4517678.04	-4517677.98	-4517677.88	0.0071	0.0062
Mercury	-17082-07-07 13:55 J	-4517590.01	-4517589.92	-4517589.80	0.0072	0.0054
Mercury	-17082-10-03 15:07 J	-4517501.97	-4517501.87	-4517501.73	0.0072	0.0046
Mercury	-17082-12-30 16:33 J	-4517413.93	-4517413.81	-4517413.67	0.0072	0.0038
Mercury	-17081-03-27 18:00 J	-4517325.89	-4517325.75	-4517325.60	0.0072	0.0029
Mercury	-17081-06-23 19:11 J	-4517237.84	-4517237.70	-4517237.54	0.0072	0.0021
Mercury	-17081-09-19 20:38 J	-4517149.79	-4517149.64	-4517149.48	0.0072	0.0013
Mercury	-17081-12-16 22:04 J	-4517061.74	-4517061.58	-4517061.42	0.0072	0.0005
Mercury	-17080-03-14 23:16 J	-4516973.68	-4516973.53	-4516973.37	0.0072	0.0005
Mercury	-17080-06-11 00:43 J	-4516885.62	-4516885.47	-4516885.31	0.0073	0.0012

Mercury	-17080-09-07 02:09 J	-4516797.56	-4516797.41	-4516797.26	0.0073	0.0021
Mercury	-17080-12-04 03:21 J	-4516709.50	-4516709.36	-4516709.21	0.0073	0.0030
Mercury	-17079-03-02 04:33 J	-4516621.43	-4516621.31	-4516621.16	0.0073	0.0039
Mercury	-17079-05-29 06:14 J	-4516533.36	-4516533.24	-4516533.12	0.0073	0.0047
Mercury	-17079-08-25 07:26 J	-4516445.28	-4516445.19	-4516445.08	0.0073	0.0056
Mercury	-17079-11-21 08:52 J	-4516357.19	-4516357.13	-4516357.05	0.0073	0.0065
Venus	-17011-07-21 22:33 J	-4491642.73	-4491642.56	-4491642.34	0.0080	0.0040
Venus	-17010-03-04 10:04 J	-4491417.29	-4491417.08	-4491416.87	0.0080	0.0030
Moon	-17005-03-11 21:36 J	-4489582.81	-4489582.60	-4489582.34	0.0077	0.0035
Earth	-17005-03-12 00:57 J	-4489582.69	-4489582.46	-4489582.22	0.0077	0.0034 *

# 17TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 17th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-16997-03-14 21:07 J	-4486657.65	-4486657.62	-4486657.55	0.0073	0.0069		
Mercury	-16997-06-10 22:48 J	-4486569.63	-4486569.55	-4486569.45	0.0072	0.0060		
Mercury	-16997-09-07 00:28 J	-4486481.59	-4486481.48	-4486481.37	0.0072	0.0051		
Mercury	-16997-12-04 01:40 J	-4486393.55	-4486393.43	-4486393.29	0.0072	0.0042		
Mercury	-16996-03-02 02:52 J	-4486305.51	-4486305.38	-4486305.22	0.0072	0.0034		
Mercury	-16996-05-29 04:33 J	-4486217.46	-4486217.31	-4486217.16	0.0072	0.0025		
Mercury	-16996-08-25 05:45 J	-4486129.41	-4486129.26	-4486129.10	0.0072	0.0017		
Mercury	-16996-11-21 07:11 J	-4486041.35	-4486041.20	-4486041.04	0.0072	0.0009		

Mercury	-16995-02-17 08:38 J	-4485953.30	-4485953.14	-4485952.98	0.0072	0.0000
Mercury	-16995-05-16 09:50 J	-4485865.24	-4485865.09	-4485864.93	0.0071	0.0008
Mercury	-16995-08-12 11:02 J	-4485777.18	-4485777.04	-4485776.88	0.0071	0.0017
Mercury	-16995-11-08 12:28 J	-4485689.12	-4485688.98	-4485688.83	0.0071	0.0024
Mercury	-16994-02-04 13:40 J	-4485601.06	-4485600.93	-4485600.78	0.0071	0.0032
Mercury	-16994-05-03 14:52 J	-4485513.00	-4485512.88	-4485512.74	0.0071	0.0040
Mercury	-16994-07-30 16:04 J	-4485424.93	-4485424.83	-4485424.70	0.0071	0.0048
Mercury	-16994-10-26 17:16 J	-4485336.86	-4485336.78	-4485336.67	0.0071	0.0056
Mercury	-16993-01-22 18:43 J	-4485248.78	-4485248.72	-4485248.64	0.0071	0.0063
Venus	-16852-07-31 12:28 J	-4433558.06	-4433557.98	-4433557.87	0.0064	0.0057
Venus	-16851-03-13 16:04 J	-4433333.02	-4433332.83	-4433332.61	0.0064	0.0023
Venus	-16851-10-24 20:09 J	-4433107.87	-4433107.66	-4433107.45	0.0064	0.0012
Venus	-16850-06-06 23:45 J	-4432882.64	-4432882.51	-4432882.35	0.0064	0.0047
Moon	-16843-09-08 14:23 J	-4430232.11	-4430231.90	-4430231.67	0.0067	0.0032
Earth	-16843-09-08 17:02 J	-4430232.00	-4430231.79	-4430231.55	0.0067	0.0033 *
Mercury	-16834-05-06 18:57 J	-4427069.73	-4427069.71	-4427069.67	0.0071	0.0070
Mercury	-16834-08-02 20:23 J	-4426981.72	-4426981.65	-4426981.57	0.0071	0.0062
Mercury	-16834-10-29 21:36 J	-4426893.70	-4426893.60	-4426893.49	0.0072	0.0054
Mercury	-16833-01-25 22:48 J	-4426805.66	-4426805.55	-4426805.42	0.0072	0.0046
Mercury	-16833-04-23 00:14 J	-4426717.62	-4426717.49	-4426717.36	0.0072	0.0038
Mercury	-16833-07-20 01:26 J	-4426629.58	-4426629.44	-4426629.29	0.0072	0.0030
Mercury	-16833-10-16 02:38 J	-4426541.53	-4426541.39	-4426541.23	0.0072	0.0022
Mercury	-16832-01-12 04:04 J	-4426453.48	-4426453.33	-4426453.17	0.0072	0.0014
Mercury	-16832-04-10 05:31 J	-4426365.43	-4426365.27	-4426365.11	0.0072	0.0005
Mercury	-16832-07-07 06:43 J	-4426277.37	-4426277.22	-4426277.06	0.0072	0.0004
Mercury	-16832-10-03 08:09 J	-4426189.32	-4426189.16	-4426189.00	0.0072	0.0012
Mercury	-16832-12-30 09:21 J	-4426101.25	-4426101.11	-4426100.95	0.0073	0.0021
Mercury	-16831-03-28 10:48 J	-4426013.19	-4426013.05	-4426012.90	0.0073	0.0029
Mercury	-16831-06-24 12:00 J	-4425925.12	-4425925.00	-4425924.85	0.0073	0.0038
Mercury	-16831-09-20 13:26 J	-4425837.05	-4425836.94	-4425836.81	0.0073	0.0047



Mercury	-16831-12-17 15:07 J	-4425748.97	-4425748.87	-4425748.77	0.0073	0.0056
Mercury	-16830-03-15 16:19 J	-4425660.88	-4425660.82	-4425660.74	0.0073	0.0065
Venus	-16762-02-04 08:09 J	-4400863.38	-4400863.16	-4400862.94	0.0080	0.0017
Venus	-16762-09-17 18:43 J	-4400637.88	-4400637.72	-4400637.54	0.0079	0.0052
Earth	-16757-03-12 23:31 J	-4398999.53	-4398999.52	-4398999.44	0.0077	0.0076
Mercury	-16749-07-07 04:48 J	-4395961.34	-4395961.30	-4395961.26	0.0073	0.0070
Mercury	-16749-10-03 05:45 J	-4395873.33	-4395873.26	-4395873.16	0.0072	0.0062
Mercury	-16749-12-30 07:26 J	-4395785.29	-4395785.19	-4395785.08	0.0072	0.0053
Mercury	-16748-03-28 08:38 J	-4395697.25	-4395697.14	-4395697.00	0.0072	0.0044
Mercury	-16748-06-24 10:19 J	-4395609.21	-4395609.07	-4395608.93	0.0072	0.0035
Mercury	-16748-09-20 11:31 J	-4395521.16	-4395521.02	-4395520.86	0.0072	0.0027
Mercury	-16748-12-17 12:57 J	-4395433.11	-4395432.96	-4395432.80	0.0072	0.0018
Mercury	-16747-03-15 14:23 J	-4395345.06	-4395344.90	-4395344.74	0.0072	0.0010
Mercury	-16747-06-11 15:50 J	-4395257.00	-4395256.84	-4395256.68	0.0072	0.0002
Mercury	-16747-09-07 17:02 J	-4395168.94	-4395168.79	-4395168.63	0.0071	0.0007
Mercury	-16747-12-04 18:28 J	-4395080.89	-4395080.73	-4395080.58	0.0071	0.0015
Mercury	-16746-03-02 19:40 J	-4394992.83	-4394992.68	-4394992.53	0.0071	0.0023
Mercury	-16746-05-29 20:38 J	-4394904.77	-4394904.64	-4394904.48	0.0071	0.0032
Mercury	-16746-08-25 22:04 J	-4394816.70	-4394816.58	-4394816.44	0.0071	0.0039
Mercury	-16746-11-21 23:31 J	-4394728.63	-4394728.52	-4394728.40	0.0071	0.0046
Mercury	-16745-02-18 00:43 J	-4394640.56	-4394640.47	-4394640.36	0.0071	0.0054
Mercury	-16745-05-16 01:55 J	-4394552.49	-4394552.42	-4394552.34	0.0071	0.0062
Mercury	-16745-08-12 02:52 J	-4394464.38	-4394464.38	-4394464.34	0.0070	0.0070
Venus	-16603-02-13 19:11 J	-4342778.83	-4342778.70	-4342778.54	0.0064	0.0048
Venus	-16603-09-26 23:02 J	-4342553.75	-4342553.54	-4342553.32	0.0064	0.0014
Venus	-16602-05-10 02:23 J	-4342328.58	-4342328.40	-4342328.17	0.0064	0.0022
Venus	-16602-12-21 06:43 J	-4342103.32	-4342103.22	-4342103.11	0.0065	0.0056
Earth	-16595-09-09 20:09 J	-4339648.92	-4339648.66	-4339648.40	0.0067	0.0005
Moon	-16595-09-09 22:19 J	-4339648.82	-4339648.57	-4339648.29	0.0067	0.0009 *
Mercury	-16586-11-25 03:21 J	-4336285.42	-4336285.36	-4336285.28	0.0071	0.0064

Mercury	-16585-02-21 04:48 J	-4336197.39	-4336197.30	-4336197.20	0.0072	0.0056
Mercury	-16585-05-19 06:00 J	-4336109.36	-4336109.25	-4336109.13	0.0072	0.0048
Mercury	-16585-08-15 07:11 J	-4336021.32	-4336021.20	-4336021.06	0.0072	0.0040
Mercury	-16585-11-11 08:23 J	-4335933.28	-4335933.15	-4335933.00	0.0072	0.0032
Mercury	-16584-02-07 09:50 J	-4335845.23	-4335845.09	-4335844.94	0.0072	0.0024
Mercury	-16584-05-06 11:16 J	-4335757.18	-4335757.03	-4335756.88	0.0072	0.0015
Mercury	-16584-08-02 12:28 J	-4335669.13	-4335668.98	-4335668.82	0.0072	0.0008
Mercury	-16584-10-29 13:55 J	-4335581.08	-4335580.92	-4335580.76	0.0072	0.0002
Mercury	-16583-01-25 15:21 J	-4335493.02	-4335492.86	-4335492.71	0.0072	0.0010
Mercury	-16583-04-23 16:33 J	-4335404.96	-4335404.81	-4335404.65	0.0073	0.0019
Mercury	-16583-07-20 18:00 J	-4335316.89	-4335316.75	-4335316.60	0.0073	0.0027
Mercury	-16583-10-16 19:11 J	-4335228.83	-4335228.70	-4335228.55	0.0073	0.0036
Mercury	-16582-01-12 20:38 J	-4335140.76	-4335140.64	-4335140.51	0.0073	0.0045
Mercury	-16582-04-10 21:50 J	-4335052.68	-4335052.59	-4335052.47	0.0073	0.0054
Mercury	-16582-07-07 23:45 J	-4334964.59	-4334964.51	-4334964.43	0.0073	0.0063
Mercury	-16582-10-04 00:57 J	-4334876.48	-4334876.46	-4334876.42	0.0073	0.0072
Venus	-16514-01-07 06:00 J	-4310309.38	-4310309.25	-4310309.11	0.0080	0.0064
Venus	-16514-08-20 17:02 J	-4310084.01	-4310083.79	-4310083.56	0.0080	0.0005
Venus	-16513-04-02 03:50 J	-4309858.41	-4309858.34	-4309858.26	0.0079	0.0074
Earth	-16508-03-16 01:26 J	-4308049.65	-4308049.44	-4308049.21	0.0077	0.0039
Moon	-16508-03-16 04:33 J	-4308049.53	-4308049.31	-4308049.08	0.0077	0.0040 *
Mercury	-16501-10-29 11:31 J	-4305265.02	-4305265.02	-4305264.98	0.0073	0.0072
Mercury	-16500-01-25 13:11 J	-4305177.02	-4305176.95	-4305176.86	0.0072	0.0063
Mercury	-16500-04-23 14:23 J	-4305088.99	-4305088.90	-4305088.78	0.0072	0.0054
Mercury	-16500-07-20 16:04 J	-4305000.95	-4305000.83	-4305000.70	0.0072	0.0045
Mercury	-16500-10-16 17:16 J	-4304912.90	-4304912.78	-4304912.63	0.0072	0.0037
Mercury	-16499-01-12 18:57 J	-4304824.86	-4304824.71	-4304824.56	0.0072	0.0028
Mercury	-16499-04-10 20:09 J	-4304736.80	-4304736.66	-4304736.50	0.0072	0.0020
Mercury	-16499-07-07 21:36 J	-4304648.75	-4304648.60	-4304648.44	0.0072	0.0011
Mercury	-16499-10-03 23:02 J	-4304560.70	-4304560.54	-4304560.38	0.0072	0.0003

Mercury	-16499-12-31 00:28 J	-4304472.64	-4304472.48	-4304472.33	0.0071	0.0006
Mercury	-16498-03-29 01:40 J	-4304384.58	-4304384.43	-4304384.27	0.0071	0.0014
Mercury	-16498-06-25 03:07 J	-4304296.53	-4304296.37	-4304296.22	0.0071	0.0022
Mercury	-16498-09-21 04:04 J	-4304208.46	-4304208.33	-4304208.18	0.0071	0.0030
Mercury	-16498-12-18 05:16 J	-4304120.40	-4304120.28	-4304120.13	0.0071	0.0038
Mercury	-16497-03-15 06:28 J	-4304032.33	-4304032.23	-4304032.09	0.0071	0.0046
Mercury	-16497-06-11 08:09 J	-4303944.26	-4303944.16	-4303944.06	0.0071	0.0053
Mercury	-16497-09-07 09:07 J	-4303856.19	-4303856.12	-4303856.03	0.0071	0.0061
Mercury	-16497-12-04 10:19 J	-4303768.09	-4303768.07	-4303768.02	0.0070	0.0069
Venus	-16355-08-30 00:28 J	-4251999.63	-4251999.48	-4251999.31	0.0064	0.0043
Venus	-16354-04-12 04:04 J	-4251774.53	-4251774.33	-4251774.10	0.0064	0.0010
Venus	-16354-11-23 07:55 J	-4251549.36	-4251549.17	-4251548.96	0.0064	0.0026
Venus	-16353-07-05 11:45 J	-4251324.06	-4251324.01	-4251323.92	0.0065	0.0061
Moon	-16347-09-10 19:40 J	-4249065.90	-4249065.68	-4249065.45	0.0067	0.0028
Earth	-16347-09-10 20:09 J	-4249065.87	-4249065.66	-4249065.41	0.0067	0.0030 *
Mercury	-16337-03-18 09:50 J	-4245589.12	-4245589.09	-4245589.04	0.0071	0.0069
Mercury	-16337-06-14 11:02 J	-4245501.11	-4245501.04	-4245500.95	0.0071	0.0061
Mercury	-16337-09-10 12:14 J	-4245413.08	-4245412.99	-4245412.87	0.0072	0.0053
Mercury	-16337-12-07 13:40 J	-4245325.04	-4245324.93	-4245324.80	0.0072	0.0045
Mercury	-16336-03-05 14:52 J	-4245237.00	-4245236.88	-4245236.73	0.0072	0.0037
Mercury	-16336-06-01 16:04 J	-4245148.96	-4245148.83	-4245148.67	0.0072	0.0029
Mercury	-16336-08-28 17:31 J	-4245060.91	-4245060.77	-4245060.61	0.0072	0.0020
Mercury	-16336-11-24 18:57 J	-4244972.86	-4244972.71	-4244972.55	0.0072	0.0012
Mercury	-16335-02-20 20:23 J	-4244884.81	-4244884.65	-4244884.49	0.0072	0.0004
Mercury	-16335-05-19 21:36 J	-4244796.75	-4244796.60	-4244796.44	0.0072	0.0005
Mercury	-16335-08-15 23:02 J	-4244708.69	-4244708.54	-4244708.39	0.0073	0.0014
Mercury	-16335-11-12 00:14 J	-4244620.63	-4244620.49	-4244620.33	0.0073	0.0022
Mercury	-16334-02-08 01:40 J	-4244532.57	-4244532.43	-4244532.28	0.0073	0.0031
Mercury	-16334-05-07 02:52 J	-4244444.50	-4244444.38	-4244444.24	0.0073	0.0040
Mercury	-16334-08-03 04:04 J	-4244356.43	-4244356.33	-4244356.19	0.0073	0.0049

Mercury	-16334-10-30 06:00 J	-4244268.35	-4244268.25	-4244268.16	0.0073	0.0058
Mercury	-16333-01-26 07:11 J	-4244180.26	-4244180.20	-4244180.13	0.0073	0.0067
Venus	-16266-07-23 11:31 J	-4219530.17	-4219530.02	-4219529.85	0.0080	0.0056
Venus	-16265-03-04 22:19 J	-4219304.78	-4219304.57	-4219304.33	0.0080	0.0014
Moon	-16260-03-16 17:31 J	-4217467.00	-4217466.77	-4217466.52	0.0077	0.0025
Earth	-16260-03-16 19:55 J	-4217466.91	-4217466.67	-4217466.41	0.0077	0.0021 *
Mercury	-16252-05-19 19:11 J	-4214480.74	-4214480.70	-4214480.64	0.0072	0.0069
Mercury	-16252-08-15 20:23 J	-4214392.72	-4214392.65	-4214392.54	0.0072	0.0060
Mercury	-16252-11-11 21:50 J	-4214304.68	-4214304.59	-4214304.46	0.0072	0.0052
Mercury	-16251-02-07 23:31 J	-4214216.64	-4214216.52	-4214216.38	0.0072	0.0042
Mercury	-16251-05-07 00:43 J	-4214128.60	-4214128.47	-4214128.31	0.0072	0.0034
Mercury	-16251-08-03 02:23 J	-4214040.55	-4214040.40	-4214040.25	0.0072	0.0025
Mercury	-16251-10-30 03:36 J	-4213952.50	-4213952.35	-4213952.19	0.0072	0.0017
Mercury	-16250-01-26 05:02 J	-4213864.44	-4213864.29	-4213864.13	0.0072	0.0009
Mercury	-16250-04-24 06:28 J	-4213776.39	-4213776.23	-4213776.07	0.0071	0.0000
Mercury	-16250-07-21 07:40 J	-4213688.33	-4213688.18	-4213688.02	0.0071	0.0009
Mercury	-16250-10-17 09:07 J	-4213600.27	-4213600.12	-4213599.96	0.0071	0.0016
Mercury	-16249-01-13 10:19 J	-4213512.21	-4213512.07	-4213511.91	0.0071	0.0025
Mercury	-16249-04-10 11:45 J	-4213424.15	-4213424.01	-4213423.87	0.0071	0.0032
Mercury	-16249-07-07 12:57 J	-4213336.09	-4213335.96	-4213335.83	0.0071	0.0040
Mercury	-16249-10-03 14:09 J	-4213248.02	-4213247.91	-4213247.79	0.0071	0.0048
Mercury	-16249-12-30 15:21 J	-4213159.94	-4213159.86	-4213159.76	0.0071	0.0056
Mercury	-16248-03-28 16:33 J	-4213071.86	-4213071.81	-4213071.73	0.0071	0.0064
Venus	-16106-03-15 05:45 J	-4161220.42	-4161220.26	-4161220.08	0.0064	0.0039
Venus	-16106-10-26 09:35 J	-4160995.32	-4160995.10	-4160994.88	0.0064	0.0005
Venus	-16105-06-07 13:26 J	-4160770.13	-4160769.94	-4160769.74	0.0064	0.0030
Earth	-16099-09-11 20:24 J	-4158482.69	-4158482.65	-4158482.57	0.0067	0.0065
Earth	-16098-09-13 10:33 J	-4158116.26	-4158116.06	-4158115.83	0.0067	0.0037
Moon	-16098-09-13 12:28 J	-4158116.16	-4158115.98	-4158115.76	0.0067	0.0040 *
Mercury	-16089-10-06 17:16 J	-4154804.82	-4154804.78	-4154804.70	0.0071	0.0066

Mercury	-16088-01-02 18:43 J	-4154716.80	-4154716.72	-4154716.61	0.0072	0.0057
Mercury	-16088-03-31 19:55 J	-4154628.77	-4154628.67	-4154628.54	0.0072	0.0050
Mercury	-16088-06-27 21:35 J	-4154540.73	-4154540.60	-4154540.47	0.0072	0.0041
Mercury	-16088-09-23 22:48 J	-4154452.69	-4154452.55	-4154452.41	0.0072	0.0033
Mercury	-16088-12-21 00:00 J	-4154364.64	-4154364.50	-4154364.35	0.0072	0.0025
Mercury	-16087-03-19 01:26 J	-4154276.59	-4154276.44	-4154276.29	0.0072	0.0017
Mercury	-16087-06-15 02:38 J	-4154188.54	-4154188.39	-4154188.23	0.0072	0.0008
Mercury	-16087-09-11 04:04 J	-4154100.49	-4154100.33	-4154100.17	0.0072	0.0000
Mercury	-16087-12-08 05:16 J	-4154012.43	-4154012.28	-4154012.12	0.0072	0.0009
Mercury	-16086-03-06 06:43 J	-4153924.37	-4153924.22	-4153924.07	0.0073	0.0017
Mercury	-16086-06-02 08:09 J	-4153836.31	-4153836.16	-4153836.02	0.0073	0.0026
Mercury	-16086-08-29 09:21 J	-4153748.24	-4153748.11	-4153747.97	0.0073	0.0035
Mercury	-16086-11-25 10:33 J	-4153660.17	-4153660.06	-4153659.92	0.0073	0.0044
Mercury	-16085-02-21 11:45 J	-4153572.10	-4153572.01	-4153571.88	0.0073	0.0054
Mercury	-16085-05-19 13:40 J	-4153484.01	-4153483.93	-4153483.85	0.0073	0.0062
Mercury	-16085-08-15 15:07 J	-4153395.91	-4153395.87	-4153395.83	0.0073	0.0071
Venus	-16017-02-05 17:45 J	-4128750.93	-4128750.76	-4128750.56	0.0080	0.0044
Venus	-16017-09-18 04:48 J	-4128525.51	-4128525.30	-4128525.08	0.0080	0.0025
Earth	-16012-03-17 14:52 J	-4126883.89	-4126883.88	-4126883.79	0.0077	0.0076
Moon	-16012-03-17 15:50 J	-4126883.84	-4126883.84	-4126883.81	0.0077	0.0077 *
Mercury	-16004-12-08 03:07 J	-4123696.43	-4123696.37	-4123696.29	0.0072	0.0065
Mercury	-16003-03-06 04:19 J	-4123608.40	-4123608.32	-4123608.20	0.0072	0.0056
Mercury	-16003-06-02 05:45 J	-4123520.36	-4123520.26	-4123520.12	0.0072	0.0048
Mercury	-16003-08-29 07:26 J	-4123432.32	-4123432.19	-4123432.05	0.0072	0.0038
Mercury	-16003-11-25 08:38 J	-4123344.27	-4123344.14	-4123343.98	0.0072	0.0030
Mercury	-16002-02-21 10:19 J	-4123256.22	-4123256.07	-4123255.92	0.0072	0.0021
Mercury	-16002-05-20 11:31 J	-4123168.17	-4123168.02	-4123167.86	0.0072	0.0013
Mercury	-16002-08-16 12:57 J	-4123080.12	-4123079.96	-4123079.80	0.0072	0.0004
Mercury	-16002-11-12 14:24 J	-4122992.06	-4122991.90	-4122991.74	0.0071	0.0004
Mercury	-16001-02-08 15:35 J	-4122904.00	-4122903.85	-4122903.69	0.0071	0.0012

Mercury -16001-05-06 16:48 J -4122815.94 -4122815.80 -4122815.64 0.0071 0.0021

Mercury -16001-08-02 18:14 J -4122727.88 -4122727.74 -4122727.59 0.0071 0.0028

Mercury -16001-10-29 19:40 J -4122639.82 -4122639.68 -4122639.55 0.0071 0.0036

# 16TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 16th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-16000-01-25 20:52 J		-4122551.75	-4122551.63	-4122551.51	0.0071	0.0044	
Mercury	-16000-04-23 22:04 J		-4122463.68	-4122463.58	-4122463.47	0.0071	0.0052	
Mercury	-16000-07-20 23:16 J		-4122375.61	-4122375.53	-4122375.44	0.0071	0.0060	
Mercury	-16000-10-17 00:28 J		-4122287.51	-4122287.48	-4122287.43	0.0070	0.0068	
Venus	-15858-09-28 09:21 J		-4070441.26	-4070441.11	-4070440.92	0.0064	0.0039	
Venus	-15857-05-10 13:26 J		-4070216.15	-4070215.94	-4070215.72	0.0064	0.0005	
Venus	-15857-12-21 16:48 J		-4069990.97	-4069990.80	-4069990.59	0.0064	0.0031	
Mars	-15852-07-03 00:00 J		-4068336.50	-4068336.50	-4068336.44	0.0066	0.0066	
Moon	-15850-09-14 05:16 J		-4067533.53	-4067533.28	-4067533.01	0.0067	0.0005	
Earth	-15850-09-14 08:52 J		-4067533.39	-4067533.13	-4067532.87	0.0067	0.0006	*
Mercury	-15840-04-27 00:28 J		-4064020.53	-4064020.48	-4064020.39	0.0071	0.0065	
Mercury	-15840-07-24 01:40 J		-4063932.50	-4063932.43	-4063932.31	0.0072	0.0057	
Mercury	-15840-10-20 03:07 J		-4063844.47	-4063844.37	-4063844.24	0.0072	0.0049	
Mercury	-15839-01-16 04:33 J		-4063756.43	-4063756.31	-4063756.18	0.0072	0.0040	
Mercury	-15839-04-14 05:45 J		-4063668.39	-4063668.26	-4063668.11	0.0072	0.0032	

Mercury	-15839-07-11 06:57 J	-4063580.34	-4063580.21	-4063580.05	0.0072	0.0025
Mercury	-15839-10-07 08:38 J	-4063492.30	-4063492.14	-4063491.99	0.0072	0.0016
Mercury	-15838-01-03 09:50 J	-4063404.24	-4063404.09	-4063403.93	0.0072	0.0007
Mercury	-15838-04-01 11:16 J	-4063316.19	-4063316.03	-4063315.88	0.0072	0.0002
Mercury	-15838-06-28 12:28 J	-4063228.13	-4063227.98	-4063227.82	0.0073	0.0010
Mercury	-15838-09-24 13:40 J	-4063140.07	-4063139.93	-4063139.77	0.0073	0.0019
Mercury	-15838-12-21 14:52 J	-4063052.01	-4063051.88	-4063051.72	0.0073	0.0028
Mercury	-15837-03-18 16:33 J	-4062963.95	-4062963.81	-4062963.67	0.0073	0.0036
Mercury	-15837-06-14 17:45 J	-4062875.87	-4062875.76	-4062875.63	0.0073	0.0045
Mercury	-15837-09-10 18:57 J	-4062787.80	-4062787.71	-4062787.59	0.0073	0.0054
Mercury	-15837-12-07 20:24 J	-4062699.71	-4062699.65	-4062699.56	0.0073	0.0063
Mercury	-15836-03-05 21:50 J	-4062611.60	-4062611.59	-4062611.55	0.0073	0.0072
Venus	-15769-08-20 21:21 J	-4037971.79	-4037971.61	-4037971.42	0.0080	0.0044
Venus	-15768-04-03 08:09 J	-4037746.36	-4037746.16	-4037745.94	0.0080	0.0025
Moon	-15763-03-20 06:14 J	-4035934.50	-4035934.24	-4035933.97	0.0077	0.0006
Earth	-15763-03-20 08:38 J	-4035934.39	-4035934.14	-4035933.87	0.0077	0.0010 *
Mercury	-15755-06-28 09:50 J	-4032912.15	-4032912.09	-4032912.01	0.0072	0.0064
Mercury	-15755-09-24 11:16 J	-4032824.12	-4032824.03	-4032823.92	0.0072	0.0056
Mercury	-15755-12-21 12:57 J	-4032736.08	-4032735.96	-4032735.84	0.0072	0.0047
Mercury	-15754-03-19 14:09 J	-4032648.04	-4032647.91	-4032647.76	0.0072	0.0038
Mercury	-15754-06-15 15:35 J	-4032559.99	-4032559.85	-4032559.70	0.0072	0.0029
Mercury	-15754-09-11 17:02 J	-4032471.94	-4032471.79	-4032471.63	0.0072	0.0021
Mercury	-15754-12-08 18:28 J	-4032383.89	-4032383.73	-4032383.57	0.0072	0.0012
Mercury	-15753-03-05 19:55 J	-4032295.83	-4032295.67	-4032295.51	0.0072	0.0004
Mercury	-15753-06-01 21:07 J	-4032207.78	-4032207.62	-4032207.46	0.0071	0.0005
Mercury	-15753-08-28 22:19 J	-4032119.72	-4032119.57	-4032119.40	0.0071	0.0013
Mercury	-15753-11-24 23:45 J	-4032031.66	-4032031.51	-4032031.35	0.0071	0.0021
Mercury	-15752-02-21 00:57 J	-4031943.60	-4031943.46	-4031943.31	0.0071	0.0029
Mercury	-15752-05-20 02:24 J	-4031855.53	-4031855.40	-4031855.26	0.0071	0.0037
Mercury	-15752-08-16 03:35 J	-4031767.47	-4031767.35	-4031767.22	0.0071	0.0045

Mercury	-15752-11-12 04:48 J	-4031679.39	-4031679.30	-4031679.19	0.0071	0.0053
Mercury	-15751-02-08 06:00 J	-4031591.32	-4031591.25	-4031591.16	0.0071	0.0061
Mercury	-15751-05-07 07:11 J	-4031503.22	-4031503.20	-4031503.15	0.0070	0.0069
Venus	-15609-04-12 13:55 J	-3979662.08	-3979661.92	-3979661.72	0.0064	0.0037
Venus	-15609-11-23 18:00 J	-3979436.96	-3979436.75	-3979436.53	0.0064	0.0003
Venus	-15608-07-06 22:04 J	-3979211.77	-3979211.58	-3979211.39	0.0064	0.0032
Mars	-15604-10-09 14:09 J	-3977656.16	-3977655.91	-3977655.59	0.0066	0.0035
Earth	-15602-09-15 07:26 J	-3976950.35	-3976950.19	-3976949.97	0.0067	0.0045
Moon	-15602-09-15 11:02 J	-3976950.20	-3976950.04	-3976949.83	0.0067	0.0047 *
Moon	-15601-09-15 18:28 J	-3976583.81	-3976583.73	-3976583.59	0.0067	0.0061
Earth	-15601-09-15 22:04 J	-3976583.69	-3976583.58	-3976583.43	0.0067	0.0058 *
Mercury	-15592-08-19 06:57 J	-3973324.23	-3973324.21	-3973324.17	0.0071	0.0070
Mercury	-15592-11-15 08:09 J	-3973236.23	-3973236.16	-3973236.07	0.0071	0.0062
Mercury	-15591-02-11 09:21 J	-3973148.20	-3973148.11	-3973148.00	0.0072	0.0054
Mercury	-15591-05-10 10:33 J	-3973060.17	-3973060.06	-3973059.93	0.0072	0.0046
Mercury	-15591-08-06 11:45 J	-3972972.13	-3972972.01	-3972971.86	0.0072	0.0038
Mercury	-15591-11-02 13:26 J	-3972884.08	-3972883.94	-3972883.80	0.0072	0.0029
Mercury	-15590-01-29 14:38 J	-3972796.04	-3972795.89	-3972795.74	0.0072	0.0021
Mercury	-15590-04-27 15:50 J	-3972707.99	-3972707.84	-3972707.68	0.0072	0.0013
Mercury	-15590-07-24 17:16 J	-3972619.93	-3972619.78	-3972619.62	0.0072	0.0004
Mercury	-15590-10-20 18:43 J	-3972531.88	-3972531.72	-3972531.57	0.0072	0.0005
Mercury	-15589-01-16 19:55 J	-3972443.82	-3972443.67	-3972443.51	0.0073	0.0013
Mercury	-15589-04-13 21:07 J	-3972355.76	-3972355.62	-3972355.46	0.0073	0.0022
Mercury	-15589-07-10 22:19 J	-3972267.70	-3972267.57	-3972267.41	0.0073	0.0031
Mercury	-15589-10-06 23:45 J	-3972179.63	-3972179.51	-3972179.37	0.0073	0.0039
Mercury	-15588-01-03 01:11 J	-3972091.56	-3972091.45	-3972091.32	0.0073	0.0048
Mercury	-15588-04-01 02:24 J	-3972003.48	-3972003.40	-3972003.29	0.0073	0.0058
Mercury	-15588-06-28 03:50 J	-3971915.39	-3971915.34	-3971915.26	0.0073	0.0067
Venus	-15520-03-06 02:38 J	-3947192.58	-3947192.39	-3947192.18	0.0080	0.0037
Venus	-15520-10-17 13:26 J	-3946967.14	-3946966.94	-3946966.72	0.0079	0.0032



Earth	-15515-03-21 02:38 J	-3945351.58	-3945351.39	-3945351.18	0.0077	0.0050
Moon	-15515-03-21 05:45 J	-3945351.43	-3945351.26	-3945351.05	0.0077	0.0052 *
Mercury	-15507-10-20 15:50 J	-3942215.86	-3942215.84	-3942215.79	0.0072	0.0071
Mercury	-15506-01-16 17:16 J	-3942127.85	-3942127.78	-3942127.68	0.0072	0.0062
Mercury	-15506-04-14 18:57 J	-3942039.81	-3942039.71	-3942039.60	0.0072	0.0053
Mercury	-15506-07-11 20:09 J	-3941951.77	-3941951.66	-3941951.52	0.0072	0.0044
Mercury	-15506-10-07 21:35 J	-3941863.73	-3941863.60	-3941863.45	0.0072	0.0035
Mercury	-15505-01-03 23:02 J	-3941775.68	-3941775.54	-3941775.38	0.0072	0.0027
Mercury	-15505-04-01 00:28 J	-3941687.63	-3941687.48	-3941687.32	0.0072	0.0018
Mercury	-15505-06-28 01:55 J	-3941599.57	-3941599.42	-3941599.26	0.0072	0.0010
Mercury	-15505-09-24 03:21 J	-3941511.52	-3941511.36	-3941511.20	0.0071	0.0001
Mercury	-15505-12-21 04:48 J	-3941423.46	-3941423.30	-3941423.14	0.0071	0.0008
Mercury	-15504-03-19 06:00 J	-3941335.40	-3941335.25	-3941335.09	0.0071	0.0016
Mercury	-15504-06-15 07:11 J	-3941247.34	-3941247.20	-3941247.04	0.0071	0.0024
Mercury	-15504-09-11 08:24 J	-3941159.28	-3941159.15	-3941159.00	0.0071	0.0032
Mercury	-15504-12-08 09:50 J	-3941071.22	-3941071.09	-3941070.95	0.0071	0.0040
Mercury	-15503-03-06 11:02 J	-3940983.15	-3940983.04	-3940982.92	0.0071	0.0048
Mercury	-15503-06-02 12:14 J	-3940895.07	-3940894.99	-3940894.88	0.0071	0.0056
Mercury	-15503-08-29 13:26 J	-3940806.99	-3940806.94	-3940806.86	0.0071	0.0064
Venus	-15361-10-26 17:31 J	-3888882.92	-3888882.77	-3888882.58	0.0064	0.0038
Venus	-15360-06-08 21:35 J	-3888657.81	-3888657.60	-3888657.37	0.0064	0.0005
Venus	-15359-01-20 01:26 J	-3888432.62	-3888432.44	-3888432.24	0.0064	0.0031
Mars	-15355-01-16 00:14 J	-3886975.82	-3886975.49	-3886975.15	0.0066	0.0004
Earth	-15353-09-16 19:11 J	-3886000.94	-3886000.70	-3886000.44	0.0067	0.0013
Moon	-15353-09-16 21:07 J	-3886000.86	-3886000.62	-3886000.35	0.0067	0.0015 *
Mercury	-15343-03-09 13:40 J	-3882539.95	-3882539.93	-3882539.88	0.0071	0.0070
Mercury	-15343-06-05 14:52 J	-3882451.94	-3882451.88	-3882451.78	0.0071	0.0062
Mercury	-15343-09-01 16:19 J	-3882363.91	-3882363.82	-3882363.71	0.0072	0.0054
Mercury	-15343-11-28 17:31 J	-3882275.88	-3882275.77	-3882275.64	0.0072	0.0046
Mercury	-15342-02-24 18:57 J	-3882187.84	-3882187.71	-3882187.57	0.0072	0.0037

Mercury	-15342-05-23 20:09 J	-3882099.79	-3882099.66	-3882099.51	0.0072	0.0029
Mercury	-15342-08-19 21:21 J	-3882011.75	-3882011.61	-3882011.45	0.0072	0.0021
Mercury	-15342-11-15 22:48 J	-3881923.70	-3881923.55	-3881923.39	0.0072	0.0013
Mercury	-15341-02-12 00:14 J	-3881835.64	-3881835.49	-3881835.33	0.0072	0.0004
Mercury	-15341-05-10 01:26 J	-3881747.59	-3881747.44	-3881747.28	0.0072	0.0006
Mercury	-15341-08-06 02:52 J	-3881659.53	-3881659.38	-3881659.22	0.0073	0.0013
Mercury	-15341-11-02 04:19 J	-3881571.47	-3881571.32	-3881571.17	0.0073	0.0022
Mercury	-15340-01-29 05:31 J	-3881483.41	-3881483.27	-3881483.12	0.0073	0.0031
Mercury	-15340-04-27 06:43 J	-3881395.34	-3881395.22	-3881395.08	0.0073	0.0040
Mercury	-15340-07-24 07:55 J	-3881307.27	-3881307.17	-3881307.04	0.0073	0.0049
Mercury	-15340-10-20 09:50 J	-3881219.19	-3881219.09	-3881219.00	0.0073	0.0058
Mercury	-15339-01-16 11:02 J	-3881131.10	-3881131.04	-3881130.97	0.0073	0.0067
Venus	-15272-09-19 05:31 J	-3856413.46	-3856413.27	-3856413.07	0.0080	0.0039
Venus	-15271-05-02 16:19 J	-3856188.02	-3856187.82	-3856187.60	0.0079	0.0030
Mars	-15268-06-09 06:14 J	-3855054.44	-3855054.24	-3855054.00	0.0078	0.0053
Earth	-15266-03-23 18:43 J	-3854401.93	-3854401.72	-3854401.46	0.0077	0.0034
Moon	-15266-03-23 22:04 J	-3854401.81	-3854401.58	-3854401.32	0.0077	0.0030 *
Mercury	-15258-05-10 22:33 J	-3851431.58	-3851431.56	-3851431.51	0.0072	0.0071
Mercury	-15258-08-07 00:00 J	-3851343.57	-3851343.50	-3851343.40	0.0072	0.0062
Mercury	-15258-11-03 01:40 J	-3851255.53	-3851255.43	-3851255.32	0.0072	0.0053
Mercury	-15257-01-30 02:52 J	-3851167.49	-3851167.38	-3851167.24	0.0072	0.0044
Mercury	-15257-04-27 04:19 J	-3851079.45	-3851079.32	-3851079.17	0.0072	0.0035
Mercury	-15257-07-24 06:00 J	-3850991.40	-3850991.25	-3850991.10	0.0072	0.0026
Mercury	-15257-10-20 07:11 J	-3850903.35	-3850903.20	-3850903.04	0.0072	0.0018
Mercury	-15256-01-16 08:38 J	-3850815.29	-3850815.14	-3850814.98	0.0072	0.0009
Mercury	-15256-04-14 10:04 J	-3850727.24	-3850727.08	-3850726.92	0.0071	0.0001
Mercury	-15256-07-11 11:16 J	-3850639.18	-3850639.03	-3850638.86	0.0071	0.0008
Mercury	-15256-10-07 12:43 J	-3850551.12	-3850550.97	-3850550.81	0.0071	0.0016
Mercury	-15255-01-03 13:55 J	-3850463.06	-3850462.92	-3850462.76	0.0071	0.0025
Mercury	-15255-04-01 15:21 J	-3850375.00	-3850374.86	-3850374.72	0.0071	0.0032

Mercury	-15255-06-28 16:19 J	-3850286.93	-3850286.82	-3850286.67	0.0071	0.0041
Mercury	-15255-09-24 17:31 J	-3850198.86	-3850198.77	-3850198.64	0.0071	0.0049
Mercury	-15255-12-21 18:57 J	-3850110.79	-3850110.71	-3850110.60	0.0071	0.0057
Mercury	-15254-03-19 20:09 J	-3850022.71	-3850022.66	-3850022.58	0.0071	0.0065
Venus	-15112-05-11 22:19 J	-3798103.73	-3798103.57	-3798103.38	0.0064	0.0036
Venus	-15112-12-23 02:24 J	-3797878.62	-3797878.40	-3797878.18	0.0064	0.0002
Venus	-15111-08-05 06:14 J	-3797653.42	-3797653.24	-3797653.05	0.0064	0.0033
Mars	-15107-04-24 13:55 J	-3796295.18	-3796294.92	-3796294.61	0.0066	0.0034
Moon	-15105-09-17 18:00 J	-3795417.98	-3795417.75	-3795417.52	0.0067	0.0026
Earth	-15105-09-17 19:11 J	-3795417.94	-3795417.70	-3795417.46	0.0067	0.0024 *
Mercury	-15095-09-27 21:21 J	-3791755.65	-3791755.61	-3791755.54	0.0071	0.0067
Mercury	-15095-12-24 22:33 J	-3791667.63	-3791667.56	-3791667.46	0.0072	0.0059
Mercury	-15094-03-23 00:14 J	-3791579.60	-3791579.49	-3791579.38	0.0072	0.0050
Mercury	-15094-06-19 01:11 J	-3791491.57	-3791491.45	-3791491.32	0.0072	0.0042
Mercury	-15094-09-15 02:24 J	-3791403.53	-3791403.40	-3791403.25	0.0072	0.0034
Mercury	-15094-12-12 03:35 J	-3791315.48	-3791315.35	-3791315.19	0.0072	0.0026
Mercury	-15093-03-09 05:02 J	-3791227.43	-3791227.29	-3791227.13	0.0072	0.0018
Mercury	-15093-06-05 06:28 J	-3791139.38	-3791139.23	-3791139.07	0.0072	0.0009
Mercury	-15093-09-01 07:55 J	-3791051.33	-3791051.17	-3791051.02	0.0072	0.0002
Mercury	-15093-11-28 09:07 J	-3790963.27	-3790963.12	-3790962.96	0.0073	0.0008
Mercury	-15092-02-24 10:19 J	-3790875.22	-3790875.07	-3790874.91	0.0073	0.0017
Mercury	-15092-05-23 11:31 J	-3790787.15	-3790787.02	-3790786.86	0.0073	0.0026
Mercury	-15092-08-19 12:57 J	-3790699.09	-3790698.96	-3790698.81	0.0073	0.0035
Mercury	-15092-11-15 14:24 J	-3790611.02	-3790610.90	-3790610.77	0.0073	0.0043
Mercury	-15091-02-11 15:50 J	-3790522.95	-3790522.84	-3790522.73	0.0073	0.0052
Mercury	-15091-05-10 17:02 J	-3790434.86	-3790434.79	-3790434.69	0.0073	0.0062
Mercury	-15091-08-06 18:28 J	-3790346.76	-3790346.73	-3790346.68	0.0073	0.0071
Venus	-15023-04-04 11:16 J	-3765634.23	-3765634.03	-3765633.82	0.0080	0.0031
Venus	-15023-11-15 21:50 J	-3765408.77	-3765408.59	-3765408.37	0.0079	0.0038
Mars	-15020-09-16 08:38 J	-3764373.42	-3764373.14	-3764372.83	0.0078	0.0015

Moon	-15018-03-24 12:00 J	-3763819.24	-3763819.00	-3763818.76	0.0077	0.0027
Earth	-15018-03-24 13:55 J	-3763819.17	-3763818.92	-3763818.68	0.0077	0.0025 *
Mercury	-15010-11-29 06:00 J	-3760647.29	-3760647.25	-3760647.18	0.0072	0.0068
Mercury	-15009-02-25 07:40 J	-3760559.27	-3760559.18	-3760559.08	0.0072	0.0058
Mercury	-15009-05-23 09:07 J	-3760471.23	-3760471.12	-3760471.00	0.0072	0.0049
Mercury	-15009-08-19 10:19 J	-3760383.19	-3760383.07	-3760382.92	0.0072	0.0041
Mercury	-15009-11-15 12:00 J	-3760295.14	-3760295.00	-3760294.85	0.0072	0.0032
Mercury	-15008-02-11 13:26 J	-3760207.09	-3760206.94	-3760206.78	0.0072	0.0023
Mercury	-15008-05-10 14:52 J	-3760119.04	-3760118.88	-3760118.72	0.0072	0.0014
Mercury	-15008-08-06 16:19 J	-3760030.98	-3760030.82	-3760030.66	0.0071	0.0006
Mercury	-15008-11-02 17:31 J	-3759942.93	-3759942.77	-3759942.60	0.0071	0.0003
Mercury	-15007-01-29 18:57 J	-3759854.87	-3759854.71	-3759854.55	0.0071	0.0011
Mercury	-15007-04-27 20:09 J	-3759766.81	-3759766.66	-3759766.50	0.0071	0.0019
Mercury	-15007-07-24 21:35 J	-3759678.75	-3759678.60	-3759678.45	0.0071	0.0027
Mercury	-15007-10-20 22:33 J	-3759590.68	-3759590.56	-3759590.41	0.0071	0.0036
Mercury	-15006-01-17 00:00 J	-3759502.61	-3759502.50	-3759502.36	0.0071	0.0044
Mercury	-15006-04-15 01:11 J	-3759414.54	-3759414.45	-3759414.33	0.0071	0.0052
Mercury	-15006-07-12 02:24 J	-3759326.47	-3759326.40	-3759326.30	0.0071	0.0060
Mercury	-15006-10-08 03:35 J	-3759238.37	-3759238.35	-3759238.29	0.0070	0.0068

# 15TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 15th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Venus	-14864-11-25 01:55 J	-3707324.57	-3707324.42	-3707324.22	0.0064	0.0037
Venus	-14863-07-08 06:28 J	-3707099.45	-3707099.23	-3707099.01	0.0064	0.0003
Venus	-14862-02-18 09:50 J	-3706874.26	-3706874.09	-3706873.88	0.0064	0.0033
Earth	-14857-09-18 16:33 J	-3704834.81	-3704834.81	-3704834.77	0.0067	0.0067
Earth	-14856-09-20 06:28 J	-3704468.43	-3704468.23	-3704467.99	0.0067	0.0035
Moon	-14856-09-20 08:52 J	-3704468.32	-3704468.13	-3704467.90	0.0067	0.0037 *
Mercury	-14846-04-18 04:19 J	-3700971.36	-3700971.32	-3700971.24	0.0071	0.0066
Mercury	-14846-07-15 05:45 J	-3700883.34	-3700883.26	-3700883.16	0.0072	0.0057
Mercury	-14846-10-11 07:11 J	-3700795.31	-3700795.20	-3700795.09	0.0072	0.0049
Mercury	-14845-01-07 08:24 J	-3700707.27	-3700707.15	-3700707.02	0.0072	0.0041
Mercury	-14845-04-04 09:35 J	-3700619.23	-3700619.10	-3700618.96	0.0072	0.0033
Mercury	-14845-07-01 10:48 J	-3700531.19	-3700531.05	-3700530.90	0.0072	0.0025
Mercury	-14845-09-27 12:14 J	-3700443.14	-3700442.99	-3700442.84	0.0072	0.0016
Mercury	-14845-12-24 13:26 J	-3700355.09	-3700354.94	-3700354.78	0.0072	0.0008
Mercury	-14844-03-22 14:52 J	-3700267.04	-3700266.88	-3700266.72	0.0072	0.0001
Mercury	-14844-06-18 16:04 J	-3700178.98	-3700178.83	-3700178.67	0.0073	0.0010
Mercury	-14844-09-14 17:31 J	-3700090.92	-3700090.77	-3700090.62	0.0073	0.0018
Mercury	-14844-12-11 18:43 J	-3700002.86	-3700002.72	-3700002.57	0.0073	0.0027
Mercury	-14843-03-09 19:55 J	-3699914.79	-3699914.67	-3699914.52	0.0073	0.0036
Mercury	-14843-06-05 21:07 J	-3699826.72	-3699826.62	-3699826.48	0.0073	0.0046
Mercury	-14843-09-01 23:02 J	-3699738.65	-3699738.54	-3699738.44	0.0073	0.0054
Mercury	-14843-11-29 00:28 J	-3699650.56	-3699650.48	-3699650.41	0.0073	0.0063
Mercury	-14842-02-25 01:11 J	-3699562.45	-3699562.45	-3699562.40	0.0073	0.0073
Venus	-14775-10-18 14:52 J	-3674855.08	-3674854.88	-3674854.67	0.0080	0.0031
Venus	-14774-06-01 01:40 J	-3674629.62	-3674629.43	-3674629.23	0.0079	0.0037
Mars	-14772-12-24 06:28 J	-3673692.48	-3673692.23	-3673691.97	0.0078	0.0039
Earth	-14769-03-26 06:57 J	-3672869.35	-3672869.21	-3672869.05	0.0077	0.0062
Moon	-14769-03-26 08:09 J	-3672869.31	-3672869.16	-3672868.98	0.0077	0.0059 *
Mercury	-14761-06-18 13:11 J	-3669863.00	-3669862.95	-3669862.88	0.0072	0.0066

Mercury	-14761-09-14 14:38 J	-3669774.98	-3669774.89	-3669774.78	0.0072	0.0057
Mercury	-14761-12-11 16:04 J	-3669686.94	-3669686.83	-3669686.70	0.0072	0.0048
Mercury	-14760-03-09 17:45 J	-3669598.90	-3669598.76	-3669598.63	0.0072	0.0039
Mercury	-14760-06-05 18:57 J	-3669510.85	-3669510.71	-3669510.56	0.0072	0.0031
Mercury	-14760-09-01 20:24 J	-3669422.80	-3669422.65	-3669422.49	0.0072	0.0022
Mercury	-14760-11-28 21:50 J	-3669334.75	-3669334.59	-3669334.43	0.0072	0.0013
Mercury	-14759-02-24 23:16 J	-3669246.69	-3669246.53	-3669246.37	0.0071	0.0005
Mercury	-14759-05-24 00:28 J	-3669158.63	-3669158.48	-3669158.31	0.0071	0.0005
Mercury	-14759-08-20 01:55 J	-3669070.58	-3669070.42	-3669070.26	0.0071	0.0012
Mercury	-14759-11-16 03:21 J	-3668982.52	-3668982.36	-3668982.21	0.0071	0.0021
Mercury	-14758-02-12 04:19 J	-3668894.45	-3668894.32	-3668894.16	0.0071	0.0029
Mercury	-14758-05-11 05:45 J	-3668806.39	-3668806.26	-3668806.12	0.0071	0.0037
Mercury	-14758-08-07 06:57 J	-3668718.32	-3668718.21	-3668718.08	0.0071	0.0045
Mercury	-14758-11-03 08:24 J	-3668630.25	-3668630.15	-3668630.04	0.0071	0.0053
Mercury	-14757-01-30 09:35 J	-3668542.17	-3668542.10	-3668542.01	0.0071	0.0061
Mercury	-14757-04-27 10:48 J	-3668454.07	-3668454.05	-3668454.01	0.0070	0.0069
Venus	-14615-06-10 07:26 J	-3616545.37	-3616545.19	-3616544.99	0.0064	0.0033
Venus	-14614-01-21 11:31 J	-3616320.24	-3616320.02	-3616319.80	0.0064	0.0001
Venus	-14614-09-03 15:07 J	-3616095.04	-3616094.87	-3616094.68	0.0065	0.0036
Moon	-14608-09-21 04:33 J	-3613885.57	-3613885.31	-3613885.05	0.0067	0.0001
Earth	-14608-09-21 07:40 J	-3613885.44	-3613885.18	-3613884.92	0.0067	0.0001 *
Mercury	-14598-08-10 11:02 J	-3610275.06	-3610275.04	-3610274.98	0.0071	0.0070
Mercury	-14598-11-06 12:14 J	-3610187.05	-3610186.99	-3610186.89	0.0072	0.0062
Mercury	-14597-02-02 13:55 J	-3610099.02	-3610098.92	-3610098.82	0.0072	0.0053
Mercury	-14597-04-30 14:52 J	-3610010.99	-3610010.88	-3610010.75	0.0072	0.0045
Mercury	-14597-07-27 16:04 J	-3609922.95	-3609922.83	-3609922.68	0.0072	0.0037
Mercury	-14597-10-23 17:31 J	-3609834.91	-3609834.77	-3609834.62	0.0072	0.0029
Mercury	-14596-01-19 18:43 J	-3609746.86	-3609746.72	-3609746.56	0.0072	0.0020
Mercury	-14596-04-17 20:09 J	-3609658.81	-3609658.66	-3609658.51	0.0072	0.0012
Mercury	-14596-07-14 21:21 J	-3609570.76	-3609570.61	-3609570.45	0.0072	0.0004

Mercury	-14596-10-10 22:48 J	-3609482.71	-3609482.55	-3609482.40	0.0073	0.0006
Mercury	-14595-01-07 00:00 J	-3609394.65	-3609394.50	-3609394.34	0.0073	0.0014
Mercury	-14595-04-05 01:11 J	-3609306.59	-3609306.45	-3609306.29	0.0073	0.0023
Mercury	-14595-07-02 02:24 J	-3609218.53	-3609218.40	-3609218.25	0.0073	0.0032
Mercury	-14595-09-28 03:50 J	-3609130.46	-3609130.34	-3609130.20	0.0073	0.0041
Mercury	-14595-12-25 05:02 J	-3609042.39	-3609042.29	-3609042.16	0.0073	0.0050
Mercury	-14594-03-23 06:28 J	-3608954.31	-3608954.23	-3608954.12	0.0073	0.0059
Mercury	-14594-06-19 07:40 J	-3608866.21	-3608866.18	-3608866.10	0.0073	0.0069
Venus	-14526-05-03 21:21 J	-3584075.82	-3584075.61	-3584075.39	0.0080	0.0020
Venus	-14526-12-15 08:09 J	-3583850.33	-3583850.16	-3583849.97	0.0079	0.0047
Mars	-14523-04-02 10:33 J	-3583011.14	-3583011.06	-3583010.91	0.0078	0.0072
Moon	-14521-03-27 00:28 J	-3582286.74	-3582286.48	-3582286.21	0.0077	0.0007
Earth	-14521-03-27 02:52 J	-3582286.64	-3582286.38	-3582286.12	0.0077	0.0009 *
Mercury	-14513-10-10 19:11 J	-3579166.70	-3579166.70	-3579166.65	0.0072	0.0072
Mercury	-14512-01-06 20:38 J	-3579078.70	-3579078.64	-3579078.54	0.0072	0.0063
Mercury	-14512-04-04 22:19 J	-3578990.67	-3578990.57	-3578990.45	0.0072	0.0053
Mercury	-14512-07-01 23:45 J	-3578902.63	-3578902.51	-3578902.37	0.0072	0.0044
Mercury	-14512-09-28 01:26 J	-3578814.58	-3578814.44	-3578814.30	0.0072	0.0035
Mercury	-14512-12-25 02:38 J	-3578726.53	-3578726.39	-3578726.23	0.0072	0.0027
Mercury	-14511-03-23 04:04 J	-3578638.48	-3578638.33	-3578638.17	0.0072	0.0018
Mercury	-14511-06-19 05:31 J	-3578550.43	-3578550.27	-3578550.11	0.0072	0.0009
Mercury	-14511-09-15 06:57 J	-3578462.37	-3578462.21	-3578462.05	0.0071	0.0001
Mercury	-14511-12-12 08:24 J	-3578374.31	-3578374.15	-3578373.99	0.0071	0.0008
Mercury	-14510-03-10 09:35 J	-3578286.25	-3578286.10	-3578285.94	0.0071	0.0017
Mercury	-14510-06-06 10:48 J	-3578198.19	-3578198.05	-3578197.89	0.0071	0.0025
Mercury	-14510-09-02 12:14 J	-3578110.13	-3578109.99	-3578109.84	0.0071	0.0033
Mercury	-14510-11-29 13:26 J	-3578022.06	-3578021.94	-3578021.80	0.0071	0.0041
Mercury	-14509-02-25 14:52 J	-3577933.99	-3577933.88	-3577933.76	0.0071	0.0049
Mercury	-14509-05-23 15:50 J	-3577845.91	-3577845.84	-3577845.73	0.0071	0.0058
Mercury	-14509-08-19 17:02 J	-3577757.83	-3577757.79	-3577757.71	0.0070	0.0066

Venus	-14367-12-24 11:31 J	-3525766.19	-3525766.02	-3525765.82	0.0064	0.0033
Venus	-14366-08-06 15:50 J	-3525541.06	-3525540.84	-3525540.62	0.0064	0.0001
Venus	-14365-03-18 19:26 J	-3525315.86	-3525315.69	-3525315.50	0.0065	0.0036
Earth	-14360-09-22 06:00 J	-3523302.45	-3523302.25	-3523302.03	0.0067	0.0039
Moon	-14360-09-22 09:21 J	-3523302.29	-3523302.11	-3523301.89	0.0067	0.0042 *
Moon	-14359-09-23 16:48 J	-3522935.83	-3522935.80	-3522935.73	0.0067	0.0066
Earth	-14359-09-23 19:26 J	-3522935.74	-3522935.69	-3522935.57	0.0067	0.0064 *
Mercury	-14349-02-28 18:28 J	-3519490.77	-3519490.73	-3519490.67	0.0071	0.0067
Mercury	-14349-05-26 19:40 J	-3519402.75	-3519402.68	-3519402.58	0.0072	0.0060
Mercury	-14349-08-22 21:07 J	-3519314.72	-3519314.62	-3519314.51	0.0072	0.0051
Mercury	-14349-11-18 22:19 J	-3519226.69	-3519226.57	-3519226.44	0.0072	0.0043
Mercury	-14348-02-14 23:31 J	-3519138.65	-3519138.52	-3519138.38	0.0072	0.0035
Mercury	-14348-05-14 00:57 J	-3519050.61	-3519050.46	-3519050.32	0.0072	0.0026
Mercury	-14348-08-10 01:55 J	-3518962.56	-3518962.42	-3518962.26	0.0072	0.0019
Mercury	-14348-11-06 03:21 J	-3518874.51	-3518874.36	-3518874.20	0.0072	0.0010
Mercury	-14347-02-02 04:48 J	-3518786.46	-3518786.30	-3518786.15	0.0072	0.0002
Mercury	-14347-05-01 06:00 J	-3518698.40	-3518698.25	-3518698.10	0.0073	0.0008
Mercury	-14347-07-28 07:11 J	-3518610.35	-3518610.20	-3518610.04	0.0073	0.0016
Mercury	-14347-10-24 08:38 J	-3518522.29	-3518522.14	-3518521.99	0.0073	0.0025
Mercury	-14346-01-20 09:50 J	-3518434.22	-3518434.09	-3518433.95	0.0073	0.0034
Mercury	-14346-04-18 11:02 J	-3518346.15	-3518346.04	-3518345.90	0.0073	0.0043
Mercury	-14346-07-15 12:14 J	-3518258.08	-3518257.99	-3518257.86	0.0073	0.0053
Mercury	-14346-10-11 13:40 J	-3518170.00	-3518169.93	-3518169.83	0.0073	0.0061
Mercury	-14345-01-07 15:07 J	-3518081.90	-3518081.87	-3518081.81	0.0073	0.0071
Venus	-14278-11-17 01:55 J	-3493296.64	-3493296.42	-3493296.20	0.0080	0.0017
Venus	-14277-06-29 12:14 J	-3493071.14	-3493070.99	-3493070.80	0.0079	0.0051
Earth	-14273-03-27 18:57 J	-3491703.85	-3491703.71	-3491703.50	0.0077	0.0058
Moon	-14273-03-27 23:02 J	-3491703.71	-3491703.54	-3491703.34	0.0077	0.0053 *
Mercury	-14264-05-01 02:24 J	-3488382.42	-3488382.40	-3488382.33	0.0072	0.0070
Mercury	-14264-07-28 03:50 J	-3488294.40	-3488294.34	-3488294.23	0.0072	0.0061



Mercury	-14264-10-24 05:31 J	-3488206.37	-3488206.27	-3488206.14	0.0072	0.0051
Mercury	-14263-01-20 06:57 J	-3488118.33	-3488118.21	-3488118.06	0.0072	0.0042
Mercury	-14263-04-18 08:38 J	-3488030.28	-3488030.14	-3488029.99	0.0072	0.0033
Mercury	-14263-07-15 10:04 J	-3487942.23	-3487942.08	-3487941.92	0.0072	0.0024
Mercury	-14263-10-11 11:16 J	-3487854.18	-3487854.03	-3487853.86	0.0072	0.0016
Mercury	-14262-01-07 12:57 J	-3487766.12	-3487765.96	-3487765.80	0.0071	0.0007
Mercury	-14262-04-05 14:09 J	-3487678.07	-3487677.91	-3487677.74	0.0071	0.0003
Mercury	-14262-07-02 15:35 J	-3487590.01	-3487589.85	-3487589.69	0.0071	0.0010
Mercury	-14262-09-28 16:48 J	-3487501.95	-3487501.80	-3487501.64	0.0071	0.0019
Mercury	-14262-12-25 18:14 J	-3487413.88	-3487413.74	-3487413.59	0.0071	0.0027
Mercury	-14261-03-22 19:11 J	-3487325.82	-3487325.70	-3487325.54	0.0071	0.0036
Mercury	-14261-06-18 20:38 J	-3487237.75	-3487237.64	-3487237.50	0.0071	0.0044
Mercury	-14261-09-14 21:50 J	-3487149.68	-3487149.59	-3487149.47	0.0071	0.0052
Mercury	-14261-12-11 23:16 J	-3487061.60	-3487061.53	-3487061.44	0.0071	0.0060
Mercury	-14260-03-10 00:28 J	-3486973.51	-3486973.48	-3486973.43	0.0070	0.0068
Venus	-14119-11-26 13:11 J	-3435211.99	-3435211.95	-3435211.90	0.0064	0.0062
Venus	-14118-07-09 17:16 J	-3434986.97	-3434986.78	-3434986.58	0.0064	0.0029
Venus	-14117-02-19 21:07 J	-3434761.83	-3434761.62	-3434761.40	0.0064	0.0006
Venus	-14117-10-02 00:28 J	-3434536.62	-3434536.48	-3434536.28	0.0065	0.0041
Earth	-14111-09-24 20:52 J	-3432352.84	-3432352.63	-3432352.38	0.0067	0.0031
Moon	-14111-09-24 23:31 J	-3432352.74	-3432352.52	-3432352.27	0.0067	0.0029 *
Mercury	-14101-06-22 01:26 J	-3428794.45	-3428794.44	-3428794.41	0.0071	0.0071
Mercury	-14101-09-18 02:24 J	-3428706.45	-3428706.40	-3428706.31	0.0072	0.0063
Mercury	-14101-12-15 03:35 J	-3428618.43	-3428618.35	-3428618.23	0.0072	0.0055
Mercury	-14100-03-13 05:16 J	-3428530.40	-3428530.28	-3428530.16	0.0072	0.0046
Mercury	-14100-06-09 06:14 J	-3428442.36	-3428442.24	-3428442.10	0.0072	0.0038
Mercury	-14100-09-05 07:26 J	-3428354.32	-3428354.19	-3428354.04	0.0072	0.0030
Mercury	-14100-12-02 08:52 J	-3428266.27	-3428266.13	-3428265.98	0.0072	0.0021
Mercury	-14099-02-28 10:04 J	-3428178.23	-3428178.08	-3428177.92	0.0072	0.0013
Mercury	-14099-05-27 11:31 J	-3428090.18	-3428090.02	-3428089.87	0.0072	0.0004

Mercury	-14099-08-23 12:43 J	-3428002.12	-3428001.97	-3428001.81	0.0073	0.0004
Mercury	-14099-11-19 14:09 J	-3427914.07	-3427913.91	-3427913.76	0.0073	0.0013
Mercury	-14098-02-15 15:07 J	-3427826.01	-3427825.87	-3427825.71	0.0073	0.0022
Mercury	-14098-05-14 16:19 J	-3427737.95	-3427737.82	-3427737.66	0.0073	0.0031
Mercury	-14098-08-10 17:45 J	-3427649.88	-3427649.76	-3427649.62	0.0073	0.0040
Mercury	-14098-11-06 18:57 J	-3427561.81	-3427561.71	-3427561.58	0.0073	0.0049
Mercury	-14097-02-02 20:09 J	-3427473.73	-3427473.66	-3427473.54	0.0073	0.0059
Mercury	-14097-04-30 21:35 J	-3427385.64	-3427385.60	-3427385.52	0.0073	0.0068
Venus	-14030-10-19 21:50 J	-3402742.67	-3402742.59	-3402742.48	0.0080	0.0072
Venus	-14029-06-01 08:52 J	-3402517.35	-3402517.13	-3402516.90	0.0079	0.0005
Venus	-14028-01-12 19:40 J	-3402291.80	-3402291.68	-3402291.53	0.0079	0.0062
Earth	-14024-03-30 17:45 J	-3400753.93	-3400753.76	-3400753.54	0.0077	0.0052
Moon	-14024-03-30 21:07 J	-3400753.80	-3400753.62	-3400753.40	0.0077	0.0049 *
Mercury	-14016-11-19 10:33 J	-3397598.12	-3397598.06	-3397597.97	0.0072	0.0064
Mercury	-14015-02-15 12:14 J	-3397510.09	-3397509.99	-3397509.88	0.0072	0.0054
Mercury	-14015-05-14 13:40 J	-3397422.05	-3397421.93	-3397421.80	0.0072	0.0045
Mercury	-14015-08-10 14:52 J	-3397334.01	-3397333.88	-3397333.73	0.0072	0.0037
Mercury	-14015-11-06 16:19 J	-3397245.96	-3397245.82	-3397245.66	0.0072	0.0028
Mercury	-14014-02-02 18:00 J	-3397157.90	-3397157.75	-3397157.59	0.0072	0.0019
Mercury	-14014-05-01 19:11 J	-3397069.85	-3397069.70	-3397069.53	0.0071	0.0011
Mercury	-14014-07-28 20:52 J	-3396981.79	-3396981.63	-3396981.47	0.0071	0.0002
Mercury	-14014-10-24 22:04 J	-3396893.74	-3396893.58	-3396893.42	0.0071	0.0007
Mercury	-14013-01-20 23:31 J	-3396805.68	-3396805.52	-3396805.36	0.0071	0.0016
Mercury	-14013-04-18 00:43 J	-3396717.61	-3396717.47	-3396717.31	0.0071	0.0024
Mercury	-14013-07-15 02:09 J	-3396629.55	-3396629.41	-3396629.27	0.0071	0.0032
Mercury	-14013-10-11 03:07 J	-3396541.48	-3396541.37	-3396541.22	0.0071	0.0041
Mercury	-14012-01-07 04:33 J	-3396453.41	-3396453.31	-3396453.18	0.0071	0.0049
Mercury	-14012-04-05 05:45 J	-3396365.34	-3396365.26	-3396365.15	0.0071	0.0057
Mercury	-14012-07-02 07:11 J	-3396277.25	-3396277.20	-3396277.13	0.0070	0.0065

# 14TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 14th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-13870-06-11 17:16 J		-3344432.81	-3344432.78	-3344432.71	0.0064	0.0062	
Venus	-13869-01-22 21:21 J		-3344207.80	-3344207.61	-3344207.41	0.0064	0.0029	
Venus	-13869-09-04 01:26 J		-3343982.66	-3343982.44	-3343982.22	0.0064	0.0006	
Venus	-13868-04-17 04:48 J		-3343757.44	-3343757.30	-3343757.11	0.0065	0.0041	
Moon	-13863-09-25 19:11 J		-3341769.93	-3341769.70	-3341769.44	0.0067	0.0012	
Earth	-13863-09-25 20:09 J		-3341769.91	-3341769.66	-3341769.40	0.0067	0.0009	*
Mercury	-13852-01-10 08:38 J		-3338010.17	-3338010.14	-3338010.09	0.0072	0.0069	
Mercury	-13852-04-08 09:50 J		-3337922.16	-3337922.09	-3337922.00	0.0072	0.0061	
Mercury	-13852-07-05 11:16 J		-3337834.13	-3337834.03	-3337833.92	0.0072	0.0052	
Mercury	-13852-10-01 12:28 J		-3337746.10	-3337745.98	-3337745.86	0.0072	0.0044	
Mercury	-13852-12-28 13:26 J		-3337658.06	-3337657.94	-3337657.79	0.0072	0.0036	
Mercury	-13851-03-26 14:52 J		-3337570.02	-3337569.88	-3337569.73	0.0072	0.0028	
Mercury	-13851-06-22 16:04 J		-3337481.97	-3337481.83	-3337481.67	0.0072	0.0019	
Mercury	-13851-09-18 17:31 J		-3337393.92	-3337393.77	-3337393.62	0.0072	0.0011	
Mercury	-13851-12-15 18:43 J		-3337305.87	-3337305.72	-3337305.56	0.0072	0.0002	
Mercury	-13850-03-13 19:55 J		-3337217.82	-3337217.67	-3337217.51	0.0073	0.0007	
Mercury	-13850-06-09 21:07 J		-3337129.76	-3337129.62	-3337129.46	0.0073	0.0016	
Mercury	-13850-09-05 22:33 J		-3337041.70	-3337041.56	-3337041.41	0.0073	0.0024	
Mercury	-13850-12-02 23:45 J		-3336953.64	-3336953.51	-3336953.36	0.0073	0.0033	

Mercury	-13849-02-29 01:11 J	-3336865.57	-3336865.45	-3336865.32	0.0073	0.0042
Mercury	-13849-05-27 02:24 J	-3336777.50	-3336777.40	-3336777.28	0.0073	0.0051
Mercury	-13849-08-23 03:35 J	-3336689.42	-3336689.35	-3336689.25	0.0073	0.0061
Mercury	-13849-11-19 05:02 J	-3336601.32	-3336601.29	-3336601.23	0.0073	0.0070
Venus	-13781-05-04 02:09 J	-3311963.51	-3311963.41	-3311963.27	0.0080	0.0068
Venus	-13781-12-15 13:40 J	-3311738.15	-3311737.93	-3311737.70	0.0079	0.0000
Venus	-13780-07-29 00:00 J	-3311512.60	-3311512.50	-3311512.36	0.0079	0.0066
Moon	-13776-03-31 09:35 J	-3310171.35	-3310171.10	-3310170.85	0.0077	0.0008
Earth	-13776-03-31 11:02 J	-3310171.28	-3310171.04	-3310170.77	0.0077	0.0012 *
Mercury	-13767-03-13 16:04 J	-3306901.84	-3306901.83	-3306901.77	0.0072	0.0071
Mercury	-13767-06-09 18:14 J	-3306813.83	-3306813.74	-3306813.66	0.0072	0.0061
Mercury	-13767-09-05 19:40 J	-3306725.79	-3306725.68	-3306725.57	0.0072	0.0051
Mercury	-13767-12-02 20:38 J	-3306637.75	-3306637.64	-3306637.49	0.0072	0.0043
Mercury	-13766-02-28 22:19 J	-3306549.70	-3306549.57	-3306549.42	0.0072	0.0034
Mercury	-13766-05-27 23:45 J	-3306461.65	-3306461.51	-3306461.35	0.0072	0.0025
Mercury	-13766-08-24 01:26 J	-3306373.60	-3306373.44	-3306373.28	0.0072	0.0016
Mercury	-13766-11-20 02:38 J	-3306285.54	-3306285.39	-3306285.22	0.0071	0.0008
Mercury	-13765-02-16 04:04 J	-3306197.49	-3306197.33	-3306197.16	0.0071	0.0002
Mercury	-13765-05-14 05:31 J	-3306109.43	-3306109.27	-3306109.11	0.0071	0.0010
Mercury	-13765-08-10 06:57 J	-3306021.37	-3306021.21	-3306021.06	0.0071	0.0019
Mercury	-13765-11-06 08:09 J	-3305933.30	-3305933.16	-3305933.01	0.0071	0.0027
Mercury	-13764-02-02 09:35 J	-3305845.24	-3305845.10	-3305844.96	0.0071	0.0035
Mercury	-13764-05-01 10:33 J	-3305757.17	-3305757.06	-3305756.92	0.0071	0.0044
Mercury	-13764-07-28 12:00 J	-3305669.10	-3305669.00	-3305668.88	0.0071	0.0052
Mercury	-13764-10-24 13:11 J	-3305581.02	-3305580.95	-3305580.85	0.0071	0.0060
Mercury	-13763-01-20 14:38 J	-3305492.92	-3305492.89	-3305492.84	0.0070	0.0068
Venus	-13622-12-25 22:48 J	-3253653.63	-3253653.55	-3253653.46	0.0064	0.0058
Venus	-13621-08-07 02:52 J	-3253428.58	-3253428.38	-3253428.18	0.0064	0.0025
Venus	-13620-03-20 06:43 J	-3253203.43	-3253203.22	-3253203.00	0.0065	0.0010
Venus	-13620-10-31 10:04 J	-3252978.21	-3252978.08	-3252977.90	0.0065	0.0045

Mars	-13616-10-29 02:09 J	-3251519.50	-3251519.41	-3251519.24	0.0066	0.0062
Moon	-13615-09-26 20:09 J	-3251186.84	-3251186.66	-3251186.41	0.0067	0.0041
Earth	-13615-09-26 20:24 J	-3251186.82	-3251186.65	-3251186.42	0.0067	0.0042 *
Earth	-13614-09-28 10:04 J	-3250820.15	-3250820.08	-3250819.94	0.0067	0.0062
Moon	-13614-09-28 12:28 J	-3250820.07	-3250819.98	-3250819.83	0.0067	0.0060 *
Mercury	-13604-07-31 16:48 J	-3247225.86	-3247225.80	-3247225.73	0.0072	0.0064
Mercury	-13604-10-27 17:45 J	-3247137.84	-3247137.76	-3247137.65	0.0072	0.0056
Mercury	-13603-01-23 18:57 J	-3247049.81	-3247049.71	-3247049.58	0.0072	0.0048
Mercury	-13603-04-21 20:24 J	-3246961.77	-3246961.65	-3246961.52	0.0072	0.0039
Mercury	-13603-07-18 21:35 J	-3246873.73	-3246873.60	-3246873.46	0.0072	0.0031
Mercury	-13603-10-14 23:02 J	-3246785.69	-3246785.54	-3246785.40	0.0072	0.0023
Mercury	-13602-01-11 00:00 J	-3246697.64	-3246697.50	-3246697.34	0.0072	0.0015
Mercury	-13602-04-09 01:26 J	-3246609.59	-3246609.44	-3246609.29	0.0072	0.0006
Mercury	-13602-07-06 02:38 J	-3246521.54	-3246521.39	-3246521.23	0.0073	0.0003
Mercury	-13602-10-02 04:04 J	-3246433.49	-3246433.33	-3246433.18	0.0073	0.0012
Mercury	-13602-12-29 05:02 J	-3246345.43	-3246345.29	-3246345.13	0.0073	0.0021
Mercury	-13601-03-26 06:14 J	-3246257.37	-3246257.24	-3246257.08	0.0073	0.0030
Mercury	-13601-06-22 07:55 J	-3246169.30	-3246169.17	-3246169.04	0.0073	0.0039
Mercury	-13601-09-18 09:07 J	-3246081.23	-3246081.12	-3246081.00	0.0073	0.0048
Mercury	-13601-12-15 10:33 J	-3245993.16	-3245993.06	-3245992.96	0.0073	0.0057
Mercury	-13600-03-13 11:31 J	-3245905.07	-3245905.02	-3245904.94	0.0073	0.0066
Venus	-13533-11-17 08:52 J	-3221184.26	-3221184.13	-3221183.95	0.0080	0.0057
Venus	-13532-06-30 20:24 J	-3220958.87	-3220958.65	-3220958.43	0.0079	0.0011
Venus	-13531-02-11 07:11 J	-3220733.26	-3220733.20	-3220733.15	0.0079	0.0076
Moon	-13528-04-01 07:26 J	-3219588.33	-3219588.19	-3219588.01	0.0077	0.0063
Earth	-13528-04-01 06:57 J	-3219588.32	-3219588.21	-3219588.04	0.0077	0.0065 *
Mercury	-13519-10-02 00:28 J	-3216117.55	-3216117.48	-3216117.41	0.0072	0.0065
Mercury	-13519-12-29 01:55 J	-3216029.52	-3216029.42	-3216029.31	0.0072	0.0055
Mercury	-13518-03-27 03:21 J	-3215941.48	-3215941.36	-3215941.23	0.0072	0.0046
Mercury	-13518-06-23 04:48 J	-3215853.43	-3215853.30	-3215853.16	0.0072	0.0037

Mercury	-13518-09-19 06:00 J	-3215765.38	-3215765.25	-3215765.09	0.0072	0.0029
Mercury	-13518-12-16 07:40 J	-3215677.33	-3215677.18	-3215677.02	0.0072	0.0020
Mercury	-13517-03-13 09:07 J	-3215589.28	-3215589.12	-3215588.96	0.0071	0.0011
Mercury	-13517-06-09 10:33 J	-3215501.22	-3215501.06	-3215500.90	0.0071	0.0002
Mercury	-13517-09-05 12:00 J	-3215413.16	-3215413.00	-3215412.84	0.0071	0.0007
Mercury	-13517-12-02 13:11 J	-3215325.10	-3215324.95	-3215324.79	0.0071	0.0015
Mercury	-13516-02-28 14:24 J	-3215237.04	-3215236.90	-3215236.74	0.0071	0.0024
Mercury	-13516-05-27 15:50 J	-3215148.97	-3215148.84	-3215148.69	0.0071	0.0032
Mercury	-13516-08-23 17:16 J	-3215060.91	-3215060.78	-3215060.64	0.0071	0.0040
Mercury	-13516-11-19 18:14 J	-3214972.84	-3214972.74	-3214972.61	0.0071	0.0049
Mercury	-13515-02-15 19:40 J	-3214884.76	-3214884.68	-3214884.57	0.0071	0.0057
Mercury	-13515-05-14 21:07 J	-3214796.67	-3214796.62	-3214796.55	0.0070	0.0065
Venus	-13373-07-10 02:24 J	-3162874.46	-3162874.40	-3162874.30	0.0064	0.0059
Venus	-13372-02-20 06:28 J	-3162649.42	-3162649.23	-3162649.02	0.0064	0.0026
Venus	-13372-10-03 10:33 J	-3162424.27	-3162424.06	-3162423.84	0.0064	0.0009
Venus	-13371-05-16 14:09 J	-3162199.05	-3162198.91	-3162198.73	0.0065	0.0044
Mars	-13367-02-04 12:43 J	-3160839.27	-3160838.97	-3160838.65	0.0066	0.0026
Moon	-13366-09-29 06:00 J	-3160237.49	-3160237.25	-3160236.99	0.0067	0.0017
Earth	-13366-09-29 09:07 J	-3160237.35	-3160237.12	-3160236.86	0.0067	0.0020 *
Mercury	-13356-11-22 22:19 J	-3156529.57	-3156529.57	-3156529.52	0.0072	0.0071
Mercury	-13355-02-18 23:31 J	-3156441.57	-3156441.52	-3156441.43	0.0072	0.0063
Mercury	-13355-05-18 00:57 J	-3156353.55	-3156353.46	-3156353.35	0.0072	0.0054
Mercury	-13355-08-14 02:09 J	-3156265.52	-3156265.41	-3156265.28	0.0072	0.0046
Mercury	-13355-11-10 03:21 J	-3156177.48	-3156177.36	-3156177.22	0.0072	0.0038
Mercury	-13354-02-06 04:33 J	-3156089.44	-3156089.31	-3156089.16	0.0072	0.0030
Mercury	-13354-05-05 05:45 J	-3156001.39	-3156001.26	-3156001.10	0.0072	0.0022
Mercury	-13354-08-01 07:11 J	-3155913.35	-3155913.20	-3155913.04	0.0072	0.0012
Mercury	-13354-10-28 08:38 J	-3155825.30	-3155825.14	-3155824.99	0.0072	0.0004
Mercury	-13353-01-24 09:50 J	-3155737.24	-3155737.09	-3155736.94	0.0073	0.0005
Mercury	-13353-04-21 11:02 J	-3155649.19	-3155649.04	-3155648.88	0.0073	0.0014

Mercury	-13353-07-18 12:14 J	-3155561.13	-3155560.99	-3155560.84	0.0073	0.0023
Mercury	-13353-10-14 13:26 J	-3155473.07	-3155472.94	-3155472.79	0.0073	0.0032
Mercury	-13352-01-10 14:38 J	-3155385.00	-3155384.89	-3155384.75	0.0073	0.0041
Mercury	-13352-04-08 16:04 J	-3155296.93	-3155296.83	-3155296.71	0.0073	0.0050
Mercury	-13352-07-05 17:16 J	-3155208.85	-3155208.78	-3155208.67	0.0073	0.0059
Mercury	-13352-10-01 18:43 J	-3155120.76	-3155120.72	-3155120.65	0.0073	0.0068
Venus	-13284-06-02 12:57 J	-3130405.10	-3130404.96	-3130404.77	0.0080	0.0055
Venus	-13283-01-14 00:28 J	-3130179.70	-3130179.48	-3130179.26	0.0079	0.0012
Venus	-13283-08-27 11:02 J	-3129954.06	-3129954.04	-3129954.00	0.0079	0.0078
Moon	-13279-04-03 22:33 J	-3128638.79	-3128638.56	-3128638.31	0.0077	0.0034
Earth	-13279-04-04 01:26 J	-3128638.66	-3128638.44	-3128638.18	0.0077	0.0030 *
Mercury	-13270-01-24 05:45 J	-3125421.27	-3125421.26	-3125421.22	0.0072	0.0072
Mercury	-13270-04-22 07:11 J	-3125333.26	-3125333.20	-3125333.10	0.0072	0.0062
Mercury	-13270-07-19 08:38 J	-3125245.23	-3125245.14	-3125245.01	0.0072	0.0054
Mercury	-13270-10-15 10:19 J	-3125157.19	-3125157.07	-3125156.93	0.0072	0.0044
Mercury	-13269-01-11 11:45 J	-3125069.14	-3125069.01	-3125068.86	0.0072	0.0035
Mercury	-13269-04-08 13:26 J	-3124981.09	-3124980.94	-3124980.79	0.0072	0.0026
Mercury	-13269-07-05 14:52 J	-3124893.04	-3124892.88	-3124892.72	0.0072	0.0017
Mercury	-13269-10-01 16:19 J	-3124804.98	-3124804.82	-3124804.66	0.0071	0.0008
Mercury	-13269-12-28 17:45 J	-3124716.92	-3124716.76	-3124716.60	0.0071	0.0001
Mercury	-13268-03-26 19:11 J	-3124628.86	-3124628.70	-3124628.54	0.0071	0.0009
Mercury	-13268-06-22 20:24 J	-3124540.80	-3124540.65	-3124540.49	0.0071	0.0018
Mercury	-13268-09-18 21:50 J	-3124452.74	-3124452.59	-3124452.44	0.0071	0.0026
Mercury	-13268-12-15 23:02 J	-3124364.67	-3124364.54	-3124364.39	0.0071	0.0035
Mercury	-13267-03-14 00:28 J	-3124276.60	-3124276.48	-3124276.35	0.0071	0.0043
Mercury	-13267-06-10 01:26 J	-3124188.53	-3124188.44	-3124188.31	0.0071	0.0052
Mercury	-13267-09-06 02:52 J	-3124100.45	-3124100.38	-3124100.28	0.0071	0.0060
Mercury	-13267-12-03 04:04 J	-3124012.35	-3124012.33	-3124012.27	0.0070	0.0068
Venus	-13124-01-23 07:26 J	-3072095.27	-3072095.19	-3072095.06	0.0064	0.0056
Venus	-13124-09-05 11:31 J	-3071870.21	-3071870.02	-3071869.80	0.0064	0.0023

Venus	-13123-04-18 15:35 J	-3071645.06	-3071644.85	-3071644.63	0.0065	0.0012
Venus	-13123-11-29 19:26 J	-3071419.82	-3071419.69	-3071419.52	0.0065	0.0047
Mars	-13119-05-14 02:38 J	-3070158.73	-3070158.39	-3070158.05	0.0066	0.0001
Earth	-13118-09-30 09:35 J	-3069654.34	-3069654.10	-3069653.84	0.0067	0.0014
Moon	-13118-09-30 13:11 J	-3069654.19	-3069653.95	-3069653.69	0.0067	0.0013 *
Mercury	-13107-06-13 06:00 J	-3065745.28	-3065745.25	-3065745.17	0.0072	0.0067
Mercury	-13107-09-09 07:40 J	-3065657.26	-3065657.18	-3065657.09	0.0072	0.0058
Mercury	-13107-12-06 08:38 J	-3065569.23	-3065569.14	-3065569.02	0.0072	0.0050
Mercury	-13106-03-04 09:50 J	-3065481.20	-3065481.09	-3065480.95	0.0072	0.0042
Mercury	-13106-05-31 11:16 J	-3065393.16	-3065393.03	-3065392.89	0.0072	0.0033
Mercury	-13106-08-27 12:28 J	-3065305.12	-3065304.98	-3065304.83	0.0072	0.0025
Mercury	-13106-11-23 13:40 J	-3065217.07	-3065216.93	-3065216.77	0.0072	0.0017
Mercury	-13105-02-19 15:07 J	-3065129.02	-3065128.87	-3065128.72	0.0072	0.0008
Mercury	-13105-05-17 16:19 J	-3065040.97	-3065040.82	-3065040.66	0.0073	0.0002
Mercury	-13105-08-13 17:31 J	-3064952.92	-3064952.77	-3064952.61	0.0073	0.0010
Mercury	-13105-11-09 18:43 J	-3064864.86	-3064864.72	-3064864.56	0.0073	0.0019
Mercury	-13104-02-05 19:55 J	-3064776.80	-3064776.67	-3064776.51	0.0073	0.0028
Mercury	-13104-05-04 21:07 J	-3064688.74	-3064688.62	-3064688.47	0.0073	0.0037
Mercury	-13104-07-31 22:48 J	-3064600.67	-3064600.55	-3064600.43	0.0073	0.0046
Mercury	-13104-10-27 23:45 J	-3064512.59	-3064512.51	-3064512.39	0.0073	0.0055
Mercury	-13103-01-24 01:11 J	-3064424.51	-3064424.45	-3064424.36	0.0073	0.0064
Mercury	-13103-04-22 02:38 J	-3064336.39	-3064336.39	-3064336.37	0.0074	0.0073
Venus	-13036-12-16 19:11 J	-3039625.87	-3039625.70	-3039625.51	0.0080	0.0047
Venus	-13035-07-30 06:14 J	-3039400.45	-3039400.24	-3039400.02	0.0079	0.0020
Jupiter	-13034-09-02 08:09 J	-3039001.50	-3039001.16	-3039000.75	0.0079	0.0057
Earth	-13031-04-04 20:09 J	-3038055.89	-3038055.66	-3038055.40	0.0077	0.0028
Moon	-13031-04-04 23:31 J	-3038055.75	-3038055.52	-3038055.26	0.0077	0.0025 *
Mercury	-13022-08-14 13:11 J	-3034636.99	-3034636.95	-3034636.87	0.0072	0.0068
Mercury	-13022-11-10 15:07 J	-3034548.96	-3034548.87	-3034548.77	0.0072	0.0058
Mercury	-13021-02-06 16:33 J	-3034460.92	-3034460.81	-3034460.68	0.0072	0.0048



Mercury	-13021-05-04 18:14 J	-3034372.88	-3034372.74	-3034372.60	0.0072	0.0039
Mercury	-13021-07-31 19:40 J	-3034284.83	-3034284.68	-3034284.53	0.0072	0.0030
Mercury	-13021-10-27 20:52 J	-3034196.78	-3034196.63	-3034196.47	0.0072	0.0022
Mercury	-13020-01-23 22:19 J	-3034108.72	-3034108.57	-3034108.40	0.0072	0.0013
Mercury	-13020-04-22 00:00 J	-3034020.66	-3034020.50	-3034020.34	0.0071	0.0004
Mercury	-13020-07-19 01:26 J	-3033932.60	-3033932.44	-3033932.28	0.0071	0.0005
Mercury	-13020-10-15 02:38 J	-3033844.54	-3033844.39	-3033844.23	0.0071	0.0014
Mercury	-13019-01-11 04:04 J	-3033756.48	-3033756.33	-3033756.17	0.0071	0.0022
Mercury	-13019-04-09 05:16 J	-3033668.42	-3033668.28	-3033668.13	0.0071	0.0031
Mercury	-13019-07-06 06:43 J	-3033580.35	-3033580.22	-3033580.08	0.0071	0.0039
Mercury	-13019-10-02 07:55 J	-3033492.28	-3033492.17	-3033492.04	0.0071	0.0048
Mercury	-13019-12-29 09:07 J	-3033404.20	-3033404.12	-3033404.01	0.0071	0.0056
Mercury	-13018-03-27 10:33 J	-3033316.11	-3033316.06	-3033315.98	0.0070	0.0064

# 13TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 13th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-12876-08-08 12:00 J	-2981316.09	-2981316.00	-2981315.88	0.0064	0.0055		
Venus	-12875-03-21 16:04 J	-2981091.03	-2981090.83	-2981090.62	0.0064	0.0022		
Venus	-12875-11-01 19:55 J	-2980865.88	-2980865.67	-2980865.45	0.0065	0.0013		
Venus	-12874-06-14 23:31 J	-2980640.64	-2980640.52	-2980640.34	0.0065	0.0048		
Mars	-12871-08-20 12:28 J	-2979478.26	-2979477.98	-2979477.66	0.0066	0.0031		

Moon	-12870-10-01 06:14 J	-2979071.42	-2979071.24	-2979071.07	0.0066	0.0048
Earth	-12870-10-01 08:38 J	-2979071.27	-2979071.14	-2979070.95	0.0066	0.0052 *
Earth	-12869-10-01 22:19 J	-2978704.71	-2978704.57	-2978704.38	0.0067	0.0051
Moon	-12869-10-02 00:28 J	-2978704.63	-2978704.48	-2978704.26	0.0067	0.0048 *
Mercury	-12859-10-05 12:43 J	-2975048.97	-2975048.97	-2975048.96	0.0071	0.0071
Mercury	-12858-01-01 13:40 J	-2974960.99	-2974960.93	-2974960.85	0.0072	0.0064
Mercury	-12858-03-30 15:07 J	-2974872.96	-2974872.87	-2974872.77	0.0072	0.0055
Mercury	-12858-06-26 16:04 J	-2974784.93	-2974784.83	-2974784.70	0.0072	0.0047
Mercury	-12858-09-22 17:16 J	-2974696.90	-2974696.78	-2974696.64	0.0072	0.0039
Mercury	-12858-12-19 18:43 J	-2974608.86	-2974608.72	-2974608.58	0.0072	0.0030
Mercury	-12857-03-16 19:40 J	-2974520.81	-2974520.68	-2974520.52	0.0072	0.0023
Mercury	-12857-06-12 21:07 J	-2974432.77	-2974432.62	-2974432.46	0.0072	0.0013
Mercury	-12857-09-08 22:33 J	-2974344.72	-2974344.56	-2974344.41	0.0072	0.0005
Mercury	-12857-12-05 23:45 J	-2974256.67	-2974256.51	-2974256.36	0.0073	0.0004
Mercury	-12856-03-04 00:57 J	-2974168.61	-2974168.46	-2974168.31	0.0073	0.0013
Mercury	-12856-05-31 02:09 J	-2974080.55	-2974080.41	-2974080.26	0.0073	0.0022
Mercury	-12856-08-27 03:21 J	-2973992.49	-2973992.36	-2973992.21	0.0073	0.0031
Mercury	-12856-11-23 04:33 J	-2973904.43	-2973904.31	-2973904.17	0.0073	0.0040
Mercury	-12855-02-19 05:45 J	-2973816.36	-2973816.26	-2973816.13	0.0073	0.0050
Mercury	-12855-05-18 07:11 J	-2973728.28	-2973728.20	-2973728.09	0.0073	0.0058
Mercury	-12855-08-14 08:38 J	-2973640.19	-2973640.14	-2973640.07	0.0073	0.0068
Venus	-12787-07-01 23:45 J	-2948846.68	-2948846.51	-2948846.30	0.0080	0.0044
Venus	-12786-02-12 10:48 J	-2948621.25	-2948621.05	-2948620.83	0.0079	0.0024
Mars	-12783-01-17 22:33 J	-2947550.77	-2947550.56	-2947550.30	0.0078	0.0048
Earth	-12782-04-07 14:52 J	-2947105.95	-2947105.88	-2947105.75	0.0077	0.0071
Moon	-12782-04-07 17:31 J	-2947105.81	-2947105.77	-2947105.66	0.0077	0.0074 *
Mercury	-12773-03-03 20:52 J	-2943852.70	-2943852.63	-2943852.55	0.0072	0.0063
Mercury	-12773-05-30 22:19 J	-2943764.67	-2943764.57	-2943764.45	0.0072	0.0054
Mercury	-12773-08-26 23:45 J	-2943676.63	-2943676.51	-2943676.37	0.0072	0.0045
Mercury	-12773-11-23 01:11 J	-2943588.58	-2943588.45	-2943588.30	0.0072	0.0036

Mercury	-12772-02-19 02:52 J	-2943500.53	-2943500.38	-2943500.23	0.0072	0.0027
Mercury	-12772-05-18 04:19 J	-2943412.48	-2943412.32	-2943412.16	0.0072	0.0018
Mercury	-12772-08-14 05:45 J	-2943324.42	-2943324.26	-2943324.10	0.0071	0.0009
Mercury	-12772-11-10 07:11 J	-2943236.36	-2943236.20	-2943236.04	0.0071	0.0001
Mercury	-12771-02-06 08:38 J	-2943148.30	-2943148.14	-2943147.98	0.0071	0.0009
Mercury	-12771-05-05 09:50 J	-2943060.24	-2943060.09	-2943059.92	0.0071	0.0018
Mercury	-12771-08-01 11:16 J	-2942972.18	-2942972.03	-2942971.87	0.0071	0.0026
Mercury	-12771-10-28 12:43 J	-2942884.11	-2942883.97	-2942883.83	0.0071	0.0034
Mercury	-12770-01-24 13:55 J	-2942796.04	-2942795.92	-2942795.78	0.0071	0.0043
Mercury	-12770-04-22 15:21 J	-2942707.96	-2942707.86	-2942707.74	0.0071	0.0051
Mercury	-12770-07-19 16:19 J	-2942619.88	-2942619.82	-2942619.71	0.0071	0.0060
Mercury	-12770-10-15 17:45 J	-2942531.79	-2942531.76	-2942531.70	0.0070	0.0068
Venus	-12627-02-21 18:14 J	-2890536.86	-2890536.74	-2890536.58	0.0064	0.0049
Venus	-12627-10-04 22:19 J	-2890311.77	-2890311.57	-2890311.35	0.0064	0.0015
Venus	-12626-05-18 02:09 J	-2890086.60	-2890086.41	-2890086.19	0.0065	0.0020
Venus	-12626-12-29 06:14 J	-2889861.34	-2889861.24	-2889861.11	0.0065	0.0054
Jupiter	-12625-09-11 16:04 J	-2889604.30	-2889603.83	-2889603.25	0.0065	0.0023
Mars	-12623-11-27 06:43 J	-2888797.43	-2888797.22	-2888796.95	0.0066	0.0047
Moon	-12621-10-03 00:14 J	-2888121.71	-2888121.49	-2888121.25	0.0067	0.0025
Earth	-12621-10-03 01:40 J	-2888121.67	-2888121.43	-2888121.19	0.0067	0.0024 *
Mercury	-12610-04-25 20:52 J	-2884264.68	-2884264.63	-2884264.56	0.0072	0.0065
Mercury	-12610-07-22 22:04 J	-2884176.66	-2884176.58	-2884176.48	0.0072	0.0057
Mercury	-12610-10-18 23:02 J	-2884088.63	-2884088.54	-2884088.41	0.0072	0.0049
Mercury	-12609-01-15 00:28 J	-2884000.60	-2884000.48	-2884000.35	0.0072	0.0040
Mercury	-12609-04-12 01:40 J	-2883912.56	-2883912.43	-2883912.28	0.0072	0.0032
Mercury	-12609-07-09 02:52 J	-2883824.52	-2883824.38	-2883824.23	0.0072	0.0024
Mercury	-12609-10-05 04:04 J	-2883736.47	-2883736.33	-2883736.17	0.0072	0.0015
Mercury	-12608-01-01 05:31 J	-2883648.42	-2883648.27	-2883648.12	0.0072	0.0006
Mercury	-12608-03-30 06:43 J	-2883560.37	-2883560.22	-2883560.06	0.0073	0.0003
Mercury	-12608-06-26 07:55 J	-2883472.32	-2883472.17	-2883472.01	0.0073	0.0012

Mercury	-12608-09-22 09:21 J	-2883384.26	-2883384.11	-2883383.96	0.0073	0.0020
Mercury	-12608-12-19 10:33 J	-2883296.20	-2883296.06	-2883295.92	0.0073	0.0029
Mercury	-12607-03-17 11:45 J	-2883208.13	-2883208.01	-2883207.87	0.0073	0.0038
Mercury	-12607-06-13 12:57 J	-2883120.07	-2883119.96	-2883119.83	0.0073	0.0048
Mercury	-12607-09-09 14:24 J	-2883031.99	-2883031.90	-2883031.80	0.0073	0.0057
Mercury	-12607-12-06 15:50 J	-2882943.90	-2882943.84	-2882943.77	0.0073	0.0066
Venus	-12538-01-15 07:40 J	-2858067.39	-2858067.18	-2858066.97	0.0079	0.0030
Venus	-12538-08-28 18:00 J	-2857841.93	-2857841.75	-2857841.53	0.0079	0.0037
Mars	-12535-04-27 06:57 J	-2856869.49	-2856869.21	-2856868.93	0.0078	0.0023
Moon	-12534-04-08 10:19 J	-2856523.30	-2856523.07	-2856522.82	0.0077	0.0025
Earth	-12534-04-08 12:14 J	-2856523.22	-2856522.99	-2856522.72	0.0077	0.0022 *
Mercury	-12525-06-26 03:21 J	-2853156.41	-2853156.36	-2853156.28	0.0072	0.0066
Mercury	-12525-09-22 04:48 J	-2853068.38	-2853068.30	-2853068.18	0.0072	0.0057
Mercury	-12525-12-19 06:14 J	-2852980.34	-2852980.24	-2852980.10	0.0072	0.0048
Mercury	-12524-03-17 07:40 J	-2852892.30	-2852892.18	-2852892.02	0.0072	0.0039
Mercury	-12524-06-13 09:21 J	-2852804.25	-2852804.11	-2852803.95	0.0072	0.0030
Mercury	-12524-09-09 10:48 J	-2852716.20	-2852716.05	-2852715.88	0.0072	0.0021
Mercury	-12524-12-06 12:28 J	-2852628.14	-2852627.98	-2852627.82	0.0072	0.0011
Mercury	-12523-03-04 13:55 J	-2852540.08	-2852539.92	-2852539.76	0.0071	0.0003
Mercury	-12523-05-31 15:21 J	-2852452.02	-2852451.86	-2852451.70	0.0071	0.0006
Mercury	-12523-08-27 16:33 J	-2852363.96	-2852363.81	-2852363.64	0.0071	0.0015
Mercury	-12523-11-23 17:45 J	-2852275.90	-2852275.76	-2852275.59	0.0071	0.0024
Mercury	-12522-02-19 19:26 J	-2852187.83	-2852187.69	-2852187.54	0.0071	0.0032
Mercury	-12522-05-18 20:24 J	-2852099.76	-2852099.65	-2852099.50	0.0071	0.0041
Mercury	-12522-08-14 22:04 J	-2852011.69	-2852011.58	-2852011.46	0.0071	0.0049
Mercury	-12522-11-10 23:02 J	-2851923.61	-2851923.54	-2851923.43	0.0071	0.0058
Mercury	-12521-02-07 00:28 J	-2851835.52	-2851835.48	-2851835.41	0.0070	0.0066
Venus	-12379-09-07 00:28 J	-2799757.61	-2799757.48	-2799757.29	0.0064	0.0043
Venus	-12378-04-20 05:02 J	-2799532.50	-2799532.29	-2799532.07	0.0065	0.0008
Venus	-12378-12-01 08:52 J	-2799307.32	-2799307.13	-2799306.92	0.0065	0.0027

Venus	-12377-07-13 12:28 J	-2799082.01	-2799081.98	-2799081.88	0.0065	0.0062
Mars	-12374-03-06 01:55 J	-2798116.54	-2798116.42	-2798116.25	0.0066	0.0059
Moon	-12373-10-04 04:19 J	-2797538.58	-2797538.32	-2797538.05	0.0067	0.0003
Earth	-12373-10-04 05:02 J	-2797538.54	-2797538.29	-2797538.03	0.0067	0.0001 *
Mercury	-12362-08-18 04:04 J	-2793568.37	-2793568.33	-2793568.26	0.0072	0.0066
Mercury	-12362-11-14 05:16 J	-2793480.36	-2793480.28	-2793480.18	0.0072	0.0058
Mercury	-12361-02-10 06:28 J	-2793392.33	-2793392.23	-2793392.11	0.0072	0.0050
Mercury	-12361-05-08 07:40 J	-2793304.29	-2793304.18	-2793304.04	0.0072	0.0041
Mercury	-12361-08-04 08:52 J	-2793216.25	-2793216.13	-2793215.98	0.0072	0.0033
Mercury	-12361-10-31 10:19 J	-2793128.21	-2793128.07	-2793127.92	0.0072	0.0024
Mercury	-12360-01-27 11:31 J	-2793040.17	-2793040.02	-2793039.87	0.0072	0.0016
Mercury	-12360-04-25 12:43 J	-2792952.12	-2792951.97	-2792951.81	0.0072	0.0007
Mercury	-12360-07-22 14:09 J	-2792864.07	-2792863.91	-2792863.76	0.0073	0.0002
Mercury	-12360-10-18 15:21 J	-2792776.01	-2792775.86	-2792775.71	0.0073	0.0011
Mercury	-12359-01-14 16:19 J	-2792687.96	-2792687.82	-2792687.66	0.0073	0.0020
Mercury	-12359-04-12 17:31 J	-2792599.90	-2792599.77	-2792599.61	0.0073	0.0029
Mercury	-12359-07-09 19:11 J	-2792511.83	-2792511.70	-2792511.57	0.0073	0.0037
Mercury	-12359-10-05 20:24 J	-2792423.77	-2792423.65	-2792423.53	0.0073	0.0047
Mercury	-12358-01-01 21:21 J	-2792335.69	-2792335.61	-2792335.49	0.0073	0.0056
Mercury	-12358-03-30 22:33 J	-2792247.61	-2792247.56	-2792247.47	0.0073	0.0066
Venus	-12291-12-18 05:31 J	-2767513.29	-2767513.27	-2767513.24	0.0080	0.0079
Venus	-12290-07-31 16:19 J	-2767288.03	-2767287.82	-2767287.59	0.0079	0.0013
Venus	-12289-03-13 02:52 J	-2767062.53	-2767062.38	-2767062.20	0.0079	0.0053
Mars	-12287-08-04 18:28 J	-2766188.02	-2766187.73	-2766187.43	0.0078	0.0009
Earth	-12286-04-09 11:16 J	-2765940.27	-2765940.03	-2765939.77	0.0077	0.0020
Moon	-12286-04-09 11:45 J	-2765940.27	-2765940.01	-2765939.75	0.0077	0.0022 *
Mercury	-12277-10-18 10:04 J	-2762460.11	-2762460.08	-2762460.00	0.0072	0.0068
Mercury	-12276-01-14 12:00 J	-2762372.09	-2762372.00	-2762371.89	0.0072	0.0058
Mercury	-12276-04-12 13:26 J	-2762284.05	-2762283.94	-2762283.81	0.0072	0.0048
Mercury	-12276-07-09 14:52 J	-2762196.01	-2762195.88	-2762195.73	0.0072	0.0039

Mercury	-12276-10-05 16:19 J	-2762107.96	-2762107.82	-2762107.66	0.0072	0.0030
Mercury	-12275-01-01 18:00 J	-2762019.90	-2762019.75	-2762019.59	0.0072	0.0021
Mercury	-12275-03-30 19:26 J	-2761931.85	-2761931.69	-2761931.52	0.0072	0.0012
Mercury	-12275-06-26 20:52 J	-2761843.79	-2761843.63	-2761843.46	0.0071	0.0003
Mercury	-12275-09-22 22:19 J	-2761755.73	-2761755.57	-2761755.41	0.0071	0.0006
Mercury	-12275-12-19 23:45 J	-2761667.67	-2761667.51	-2761667.35	0.0071	0.0015
Mercury	-12274-03-18 01:11 J	-2761579.60	-2761579.45	-2761579.30	0.0071	0.0023
Mercury	-12274-06-14 02:24 J	-2761491.54	-2761491.40	-2761491.25	0.0071	0.0032
Mercury	-12274-09-10 03:35 J	-2761403.47	-2761403.35	-2761403.20	0.0071	0.0041
Mercury	-12274-12-07 05:02 J	-2761315.40	-2761315.29	-2761315.16	0.0071	0.0049
Mercury	-12273-03-04 06:43 J	-2761227.32	-2761227.22	-2761227.13	0.0071	0.0057
Mercury	-12273-05-31 07:40 J	-2761139.22	-2761139.18	-2761139.11	0.0070	0.0066
Venus	-12131-08-10 06:00 J	-2709203.29	-2709203.25	-2709203.16	0.0064	0.0061
Venus	-12130-03-23 10:04 J	-2708978.26	-2708978.08	-2708977.86	0.0064	0.0028
Venus	-12130-11-03 14:24 J	-2708753.11	-2708752.90	-2708752.68	0.0065	0.0007
Venus	-12129-06-15 18:00 J	-2708527.89	-2708527.75	-2708527.56	0.0065	0.0042
Mars	-12126-06-13 06:57 J	-2707435.38	-2707435.21	-2707434.96	0.0066	0.0052
Earth	-12125-10-05 12:57 J	-2706955.21	-2706954.96	-2706954.70	0.0067	0.0011
Moon	-12125-10-05 14:09 J	-2706955.15	-2706954.91	-2706954.66	0.0067	0.0011 *
Mercury	-12114-09-13 11:31 J	-2702960.04	-2702960.02	-2702959.98	0.0072	0.0070
Mercury	-12114-12-10 12:28 J	-2702872.04	-2702871.98	-2702871.89	0.0072	0.0062
Mercury	-12113-03-07 13:40 J	-2702784.02	-2702783.93	-2702783.82	0.0072	0.0054
Mercury	-12113-06-03 15:07 J	-2702695.98	-2702695.87	-2702695.75	0.0072	0.0045
Mercury	-12113-08-30 16:04 J	-2702607.95	-2702607.83	-2702607.69	0.0072	0.0037
Mercury	-12113-11-26 17:31 J	-2702519.91	-2702519.77	-2702519.63	0.0072	0.0028
Mercury	-12112-02-22 18:43 J	-2702431.86	-2702431.72	-2702431.57	0.0072	0.0020
Mercury	-12112-05-21 19:55 J	-2702343.82	-2702343.67	-2702343.52	0.0072	0.0011
Mercury	-12112-08-17 21:07 J	-2702255.77	-2702255.62	-2702255.46	0.0072	0.0003
Mercury	-12112-11-13 22:19 J	-2702167.72	-2702167.57	-2702167.41	0.0073	0.0007
Mercury	-12111-02-09 23:45 J	-2702079.66	-2702079.51	-2702079.36	0.0073	0.0015

Mercury	-12111-05-09 00:57 J	-2701991.60	-2701991.46	-2701991.31	0.0073	0.0024
Mercury	-12111-08-05 02:09 J	-2701903.54	-2701903.41	-2701903.27	0.0073	0.0033
Mercury	-12111-11-01 03:21 J	-2701815.48	-2701815.36	-2701815.23	0.0073	0.0042
Mercury	-12110-01-28 04:33 J	-2701727.41	-2701727.31	-2701727.19	0.0073	0.0051
Mercury	-12110-04-26 06:00 J	-2701639.33	-2701639.25	-2701639.16	0.0073	0.0061
Mercury	-12110-07-23 07:26 J	-2701551.23	-2701551.19	-2701551.14	0.0073	0.0070
Venus	-12042-07-03 17:16 J	-2676733.93	-2676733.78	-2676733.58	0.0080	0.0049
Venus	-12041-02-14 04:33 J	-2676508.53	-2676508.31	-2676508.09	0.0079	0.0018
Mars	-12039-11-12 14:24 J	-2675506.18	-2675505.90	-2675505.60	0.0078	0.0018
Earth	-12038-04-10 15:07 J	-2675357.08	-2675356.87	-2675356.64	0.0077	0.0043
Moon	-12038-04-10 16:19 J	-2675357.02	-2675356.82	-2675356.62	0.0077	0.0046 *
Mercury	-12028-02-09 18:28 J	-2671763.79	-2671763.73	-2671763.64	0.0072	0.0064
Mercury	-12028-05-08 19:55 J	-2671675.76	-2671675.67	-2671675.55	0.0072	0.0054
Mercury	-12028-08-04 21:35 J	-2671587.72	-2671587.60	-2671587.46	0.0072	0.0045
Mercury	-12028-10-31 23:02 J	-2671499.67	-2671499.54	-2671499.39	0.0072	0.0036
Mercury	-12027-01-28 00:28 J	-2671411.62	-2671411.48	-2671411.31	0.0072	0.0027
Mercury	-12027-04-26 02:09 J	-2671323.57	-2671323.41	-2671323.25	0.0072	0.0017
Mercury	-12027-07-23 03:35 J	-2671235.51	-2671235.35	-2671235.18	0.0071	0.0008
Mercury	-12027-10-19 05:02 J	-2671147.45	-2671147.29	-2671147.12	0.0071	0.0002
Mercury	-12026-01-15 06:28 J	-2671059.39	-2671059.23	-2671059.07	0.0071	0.0009
Mercury	-12026-04-13 07:55 J	-2670971.33	-2670971.17	-2670971.01	0.0071	0.0018
Mercury	-12026-07-10 09:07 J	-2670883.26	-2670883.12	-2670882.96	0.0071	0.0027
Mercury	-12026-10-06 10:48 J	-2670795.19	-2670795.05	-2670794.91	0.0071	0.0035
Mercury	-12025-01-02 11:45 J	-2670707.12	-2670707.01	-2670706.87	0.0071	0.0044
Mercury	-12025-03-30 12:57 J	-2670619.05	-2670618.96	-2670618.83	0.0071	0.0053
Mercury	-12025-06-26 14:24 J	-2670530.96	-2670530.90	-2670530.80	0.0071	0.0061
Mercury	-12025-09-22 16:04 J	-2670442.86	-2670442.83	-2670442.80	0.0070	0.0069

# 12TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 12th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-11882-02-23 15:50 J		-2618423.97	-2618423.84	-2618423.65	0.0064	0.0045	
Venus	-11882-10-06 20:24 J		-2618198.86	-2618198.65	-2618198.43	0.0065	0.0010	
Venus	-11881-05-19 00:00 J		-2617973.68	-2617973.50	-2617973.28	0.0065	0.0025	
Venus	-11881-12-30 03:50 J		-2617748.40	-2617748.34	-2617748.23	0.0065	0.0060	
Mars	-11878-09-20 14:24 J		-2616754.16	-2616753.90	-2616753.60	0.0066	0.0038	
Moon	-11877-10-06 19:26 J		-2616371.94	-2616371.69	-2616371.44	0.0067	0.0020	
Earth	-11877-10-06 22:04 J		-2616371.82	-2616371.58	-2616371.32	0.0067	0.0017	*
Mercury	-11865-01-05 20:09 J		-2612263.71	-2612263.66	-2612263.58	0.0072	0.0065	
Mercury	-11865-04-02 21:35 J		-2612175.69	-2612175.60	-2612175.50	0.0072	0.0056	
Mercury	-11865-06-29 22:33 J		-2612087.66	-2612087.56	-2612087.44	0.0072	0.0048	
Mercury	-11865-09-26 00:00 J		-2611999.63	-2611999.50	-2611999.37	0.0072	0.0039	
Mercury	-11865-12-23 00:57 J		-2611911.59	-2611911.46	-2611911.31	0.0072	0.0031	
Mercury	-11864-03-21 02:24 J		-2611823.54	-2611823.40	-2611823.25	0.0072	0.0023	
Mercury	-11864-06-17 03:35 J		-2611735.50	-2611735.35	-2611735.20	0.0072	0.0014	
Mercury	-11864-09-13 04:48 J		-2611647.45	-2611647.30	-2611647.14	0.0072	0.0005	
Mercury	-11864-12-10 06:00 J		-2611559.40	-2611559.25	-2611559.09	0.0073	0.0004	
Mercury	-11863-03-08 07:11 J		-2611471.34	-2611471.20	-2611471.04	0.0073	0.0013	
Mercury	-11863-06-04 08:38 J		-2611383.29	-2611383.14	-2611382.99	0.0073	0.0021	
Mercury	-11863-08-31 09:50 J		-2611295.23	-2611295.09	-2611294.95	0.0073	0.0030	
Mercury	-11863-11-27 11:02 J		-2611207.16	-2611207.04	-2611206.91	0.0073	0.0039	
Mercury	-11862-02-23 12:14 J		-2611119.10	-2611118.99	-2611118.87	0.0073	0.0049	
Mercury	-11862-05-22 13:40 J		-2611031.02	-2611030.93	-2611030.83	0.0073	0.0058	



Mercury	-11862-08-18 14:38 J	-2610942.93	-2610942.89	-2610942.81	0.0073	0.0068
Venus	-11794-06-05 21:07 J	-2586179.66	-2586179.62	-2586179.52	0.0080	0.0076
Venus	-11793-01-17 08:38 J	-2585954.35	-2585954.14	-2585953.91	0.0079	0.0009
Venus	-11793-08-29 19:26 J	-2585728.84	-2585728.69	-2585728.53	0.0079	0.0056
Mars	-11790-02-20 17:16 J	-2584823.99	-2584823.78	-2584823.52	0.0078	0.0047
Moon	-11790-04-11 21:21 J	-2584773.81	-2584773.61	-2584773.40	0.0078	0.0050
Earth	-11790-04-11 23:16 J	-2584773.72	-2584773.53	-2584773.32	0.0078	0.0051 *
Mercury	-11780-03-08 01:55 J	-2581155.47	-2581155.42	-2581155.34	0.0072	0.0066
Mercury	-11780-06-04 03:21 J	-2581067.45	-2581067.36	-2581067.24	0.0072	0.0056
Mercury	-11780-08-31 05:16 J	-2580979.41	-2580979.28	-2580979.16	0.0072	0.0046
Mercury	-11780-11-27 06:43 J	-2580891.36	-2580891.22	-2580891.08	0.0072	0.0037
Mercury	-11779-02-23 08:09 J	-2580803.31	-2580803.16	-2580803.00	0.0072	0.0028
Mercury	-11779-05-22 09:35 J	-2580715.25	-2580715.10	-2580714.94	0.0072	0.0019
Mercury	-11779-08-18 11:16 J	-2580627.20	-2580627.03	-2580626.87	0.0072	0.0010
Mercury	-11779-11-14 12:28 J	-2580539.14	-2580538.98	-2580538.81	0.0071	0.0002
Mercury	-11778-02-10 13:55 J	-2580451.08	-2580450.92	-2580450.75	0.0071	0.0008
Mercury	-11778-05-09 15:21 J	-2580363.01	-2580362.86	-2580362.70	0.0071	0.0017
Mercury	-11778-08-05 16:48 J	-2580274.95	-2580274.80	-2580274.65	0.0071	0.0026
Mercury	-11778-11-01 18:00 J	-2580186.88	-2580186.75	-2580186.60	0.0071	0.0034
Mercury	-11777-01-28 19:11 J	-2580098.81	-2580098.70	-2580098.55	0.0071	0.0043
Mercury	-11777-04-25 20:52 J	-2580010.74	-2580010.63	-2580010.52	0.0071	0.0051
Mercury	-11777-07-22 22:04 J	-2579922.65	-2579922.58	-2579922.48	0.0071	0.0060
Mercury	-11777-10-18 23:31 J	-2579834.55	-2579834.52	-2579834.47	0.0070	0.0068
Venus	-11634-01-27 00:43 J	-2527869.57	-2527869.47	-2527869.34	0.0064	0.0054
Venus	-11634-09-09 04:48 J	-2527644.50	-2527644.30	-2527644.08	0.0065	0.0020
Venus	-11633-04-21 08:38 J	-2527419.34	-2527419.14	-2527418.91	0.0065	0.0015
Venus	-11633-12-02 12:28 J	-2527194.09	-2527193.98	-2527193.81	0.0065	0.0050
Mars	-11630-12-29 08:24 J	-2526072.49	-2526072.15	-2526071.81	0.0066	0.0003
Earth	-11629-10-08 11:45 J	-2525788.27	-2525788.01	-2525787.76	0.0067	0.0009
Moon	-11629-10-08 14:24 J	-2525788.14	-2525787.90	-2525787.64	0.0067	0.0011 *

Mercury	-11618-11-05 03:35 J	-2521743.36	-2521743.35	-2521743.31	0.0072	0.0071
Mercury	-11617-02-01 04:48 J	-2521655.36	-2521655.30	-2521655.21	0.0072	0.0063
Mercury	-11617-04-29 06:14 J	-2521567.34	-2521567.24	-2521567.14	0.0072	0.0054
Mercury	-11617-07-26 07:11 J	-2521479.31	-2521479.20	-2521479.07	0.0072	0.0046
Mercury	-11617-10-22 08:38 J	-2521391.27	-2521391.14	-2521391.01	0.0072	0.0037
Mercury	-11616-01-18 09:35 J	-2521303.23	-2521303.10	-2521302.95	0.0072	0.0029
Mercury	-11616-04-16 11:02 J	-2521215.19	-2521215.04	-2521214.89	0.0072	0.0020
Mercury	-11616-07-13 12:14 J	-2521127.14	-2521126.99	-2521126.84	0.0072	0.0012
Mercury	-11616-10-09 13:26 J	-2521039.09	-2521038.94	-2521038.79	0.0073	0.0003
Mercury	-11615-01-05 14:38 J	-2520951.04	-2520950.89	-2520950.73	0.0073	0.0006
Mercury	-11615-04-03 15:50 J	-2520862.98	-2520862.84	-2520862.68	0.0073	0.0015
Mercury	-11615-06-30 17:02 J	-2520774.93	-2520774.79	-2520774.64	0.0073	0.0024
Mercury	-11615-09-26 18:14 J	-2520686.87	-2520686.74	-2520686.59	0.0073	0.0033
Mercury	-11615-12-23 19:26 J	-2520598.80	-2520598.69	-2520598.55	0.0073	0.0042
Mercury	-11614-03-21 20:38 J	-2520510.73	-2520510.64	-2520510.51	0.0073	0.0052
Mercury	-11614-06-17 22:04 J	-2520422.65	-2520422.58	-2520422.48	0.0073	0.0060
Mercury	-11614-09-13 23:31 J	-2520334.56	-2520334.52	-2520334.47	0.0074	0.0070
Venus	-11546-12-20 15:21 J	-2495400.06	-2495399.86	-2495399.63	0.0079	0.0026
Venus	-11545-08-02 02:09 J	-2495174.59	-2495174.41	-2495174.21	0.0079	0.0040
Earth	-11542-04-13 11:02 J	-2494190.23	-2494190.04	-2494189.80	0.0078	0.0044
Moon	-11542-04-13 14:09 J	-2494190.11	-2494189.91	-2494189.67	0.0078	0.0040 *
Mercury	-11532-04-03 10:04 J	-2490547.13	-2490547.08	-2490546.98	0.0072	0.0064
Mercury	-11532-06-30 12:00 J	-2490459.10	-2490459.00	-2490458.89	0.0072	0.0054
Mercury	-11532-09-26 13:26 J	-2490371.06	-2490370.94	-2490370.80	0.0072	0.0045
Mercury	-11532-12-23 14:52 J	-2490283.01	-2490282.88	-2490282.73	0.0072	0.0036
Mercury	-11531-03-21 16:19 J	-2490194.96	-2490194.82	-2490194.66	0.0072	0.0027
Mercury	-11531-06-17 17:45 J	-2490106.91	-2490106.76	-2490106.59	0.0072	0.0018
Mercury	-11531-09-13 19:26 J	-2490018.85	-2490018.69	-2490018.52	0.0071	0.0008
Mercury	-11531-12-10 20:52 J	-2489930.79	-2489930.63	-2489930.46	0.0071	0.0002
Mercury	-11530-03-08 22:19 J	-2489842.73	-2489842.57	-2489842.40	0.0071	0.0010

Mercury	-11530-06-04 23:45 J	-2489754.67	-2489754.51	-2489754.35	0.0071	0.0018
Mercury	-11530-09-01 01:11 J	-2489666.60	-2489666.45	-2489666.30	0.0071	0.0027
Mercury	-11530-11-28 02:24 J	-2489578.53	-2489578.40	-2489578.25	0.0071	0.0036
Mercury	-11529-02-24 03:35 J	-2489490.46	-2489490.35	-2489490.21	0.0071	0.0045
Mercury	-11529-05-22 05:02 J	-2489402.38	-2489402.29	-2489402.17	0.0071	0.0053
Mercury	-11529-08-18 06:14 J	-2489314.30	-2489314.24	-2489314.14	0.0071	0.0062
Mercury	-11529-11-14 07:40 J	-2489226.19	-2489226.18	-2489226.14	0.0070	0.0070
Venus	-11387-12-30 09:50 J	-2437315.14	-2437315.09	-2437314.99	0.0064	0.0061
Venus	-11386-08-12 14:09 J	-2437090.09	-2437089.91	-2437089.69	0.0065	0.0027
Venus	-11385-03-24 18:28 J	-2436864.94	-2436864.73	-2436864.51	0.0065	0.0008
Venus	-11385-11-04 22:04 J	-2436639.72	-2436639.58	-2436639.39	0.0065	0.0043
Mars	-11381-04-07 03:50 J	-2435390.57	-2435390.34	-2435390.03	0.0066	0.0041
Moon	-11381-10-09 23:02 J	-2435204.79	-2435204.54	-2435204.28	0.0067	0.0008
Earth	-11381-10-10 02:52 J	-2435204.64	-2435204.38	-2435204.12	0.0067	0.0005 *
Mercury	-11370-12-01 12:43 J	-2431135.01	-2431134.97	-2431134.90	0.0072	0.0067
Mercury	-11369-02-27 13:55 J	-2431046.99	-2431046.92	-2431046.82	0.0072	0.0059
Mercury	-11369-05-25 15:21 J	-2430958.96	-2430958.86	-2430958.75	0.0072	0.0050
Mercury	-11369-08-21 16:19 J	-2430870.93	-2430870.82	-2430870.68	0.0072	0.0042
Mercury	-11369-11-17 17:45 J	-2430782.89	-2430782.76	-2430782.62	0.0072	0.0033
Mercury	-11368-02-13 18:57 J	-2430694.85	-2430694.71	-2430694.57	0.0072	0.0025
Mercury	-11368-05-12 20:09 J	-2430606.81	-2430606.66	-2430606.51	0.0072	0.0016
Mercury	-11368-08-08 21:21 J	-2430518.76	-2430518.61	-2430518.46	0.0072	0.0007
Mercury	-11368-11-04 22:33 J	-2430430.71	-2430430.56	-2430430.40	0.0073	0.0002
Mercury	-11367-01-31 23:45 J	-2430342.66	-2430342.51	-2430342.35	0.0073	0.0011
Mercury	-11367-04-30 01:11 J	-2430254.60	-2430254.45	-2430254.30	0.0073	0.0019
Mercury	-11367-07-27 02:24 J	-2430166.54	-2430166.40	-2430166.26	0.0073	0.0028
Mercury	-11367-10-23 03:35 J	-2430078.48	-2430078.35	-2430078.21	0.0073	0.0037
Mercury	-11366-01-19 04:48 J	-2429990.41	-2429990.30	-2429990.17	0.0073	0.0047
Mercury	-11366-04-17 06:14 J	-2429902.34	-2429902.24	-2429902.14	0.0073	0.0056
Mercury	-11366-07-14 07:11 J	-2429814.25	-2429814.20	-2429814.11	0.0073	0.0065

Venus	-11298-11-23 01:26 J	-2404845.64	-2404845.44	-2404845.22	0.0079	0.0030
Venus	-11297-07-05 12:14 J	-2404620.19	-2404619.99	-2404619.79	0.0079	0.0035
Moon	-11294-04-15 01:11 J	-2403606.69	-2403606.45	-2403606.17	0.0078	0.0017
Earth	-11294-04-15 04:33 J	-2403606.55	-2403606.31	-2403606.04	0.0078	0.0018 *
Mercury	-11284-01-31 18:00 J	-2400026.79	-2400026.75	-2400026.67	0.0072	0.0068
Mercury	-11284-04-29 19:55 J	-2399938.76	-2399938.67	-2399938.57	0.0072	0.0058
Mercury	-11284-07-26 21:21 J	-2399850.72	-2399850.61	-2399850.48	0.0072	0.0048
Mercury	-11284-10-22 22:48 J	-2399762.68	-2399762.55	-2399762.40	0.0072	0.0039
Mercury	-11283-01-19 00:14 J	-2399674.63	-2399674.49	-2399674.33	0.0072	0.0030
Mercury	-11283-04-17 01:40 J	-2399586.57	-2399586.43	-2399586.26	0.0072	0.0021
Mercury	-11283-07-14 03:21 J	-2399498.52	-2399498.36	-2399498.19	0.0072	0.0011
Mercury	-11283-10-10 04:48 J	-2399410.46	-2399410.30	-2399410.13	0.0071	0.0003
Mercury	-11282-01-06 06:14 J	-2399322.40	-2399322.24	-2399322.07	0.0071	0.0007
Mercury	-11282-04-04 07:40 J	-2399234.34	-2399234.18	-2399234.02	0.0071	0.0016
Mercury	-11282-07-01 08:52 J	-2399146.27	-2399146.13	-2399145.96	0.0071	0.0025
Mercury	-11282-09-27 10:33 J	-2399058.20	-2399058.06	-2399057.92	0.0071	0.0033
Mercury	-11282-12-24 11:45 J	-2398970.13	-2398970.01	-2398969.87	0.0071	0.0042
Mercury	-11281-03-21 12:57 J	-2398882.06	-2398881.96	-2398881.83	0.0071	0.0051
Mercury	-11281-06-17 14:38 J	-2398793.97	-2398793.89	-2398793.80	0.0071	0.0059
Mercury	-11281-09-13 15:35 J	-2398705.87	-2398705.85	-2398705.79	0.0071	0.0068
Venus	-11139-12-02 22:19 J	-2346760.65	-2346760.57	-2346760.50	0.0064	0.0060
Venus	-11138-07-16 02:09 J	-2346535.60	-2346535.41	-2346535.20	0.0065	0.0026
Venus	-11137-02-26 06:14 J	-2346310.45	-2346310.24	-2346310.02	0.0065	0.0009
Venus	-11137-10-08 10:04 J	-2346085.23	-2346085.08	-2346084.90	0.0065	0.0043
Earth	-11133-10-11 21:50 J	-2344620.80	-2344620.59	-2344620.35	0.0067	0.0032
Moon	-11133-10-12 01:11 J	-2344620.65	-2344620.45	-2344620.21	0.0067	0.0035 *
Mercury	-11122-09-30 21:50 J	-2340614.63	-2340614.59	-2340614.52	0.0072	0.0067
Mercury	-11122-12-27 23:16 J	-2340526.62	-2340526.53	-2340526.44	0.0072	0.0058
Mercury	-11121-03-25 00:14 J	-2340438.59	-2340438.49	-2340438.37	0.0072	0.0050
Mercury	-11121-06-21 01:11 J	-2340350.56	-2340350.45	-2340350.31	0.0072	0.0042

Mercury	-11121-09-17 02:38 J	-2340262.52	-2340262.39	-2340262.25	0.0072	0.0033
Mercury	-11121-12-14 03:50 J	-2340174.48	-2340174.34	-2340174.19	0.0072	0.0025
Mercury	-11120-03-12 05:02 J	-2340086.43	-2340086.29	-2340086.14	0.0072	0.0016
Mercury	-11120-06-08 06:14 J	-2339998.39	-2339998.24	-2339998.08	0.0072	0.0008
Mercury	-11120-09-04 07:26 J	-2339910.34	-2339910.19	-2339910.03	0.0073	0.0003
Mercury	-11120-12-01 08:38 J	-2339822.28	-2339822.14	-2339821.98	0.0073	0.0011
Mercury	-11119-02-27 10:04 J	-2339734.23	-2339734.08	-2339733.93	0.0073	0.0019
Mercury	-11119-05-26 11:16 J	-2339646.17	-2339646.03	-2339645.89	0.0073	0.0028
Mercury	-11119-08-22 12:28 J	-2339558.11	-2339557.98	-2339557.84	0.0073	0.0038
Mercury	-11119-11-18 13:55 J	-2339470.04	-2339469.92	-2339469.81	0.0073	0.0047
Mercury	-11118-02-14 14:38 J	-2339381.97	-2339381.89	-2339381.77	0.0073	0.0057
Mercury	-11118-05-13 16:04 J	-2339293.88	-2339293.83	-2339293.75	0.0073	0.0066
Venus	-11050-10-26 14:09 J	-2314291.12	-2314290.91	-2314290.70	0.0079	0.0027
Venus	-11049-06-08 00:28 J	-2314065.67	-2314065.48	-2314065.28	0.0079	0.0038
Earth	-11046-04-17 00:57 J	-2313022.69	-2313022.46	-2313022.19	0.0077	0.0022
Moon	-11046-04-17 05:02 J	-2313022.54	-2313022.29	-2313022.03	0.0077	0.0018 *
Mercury	-11037-12-01 02:38 J	-2309506.43	-2309506.39	-2309506.32	0.0072	0.0068
Mercury	-11036-02-27 04:19 J	-2309418.41	-2309418.32	-2309418.21	0.0072	0.0058
Mercury	-11036-05-26 05:45 J	-2309330.37	-2309330.26	-2309330.13	0.0072	0.0049
Mercury	-11036-08-22 07:26 J	-2309242.32	-2309242.19	-2309242.05	0.0072	0.0039
Mercury	-11036-11-18 08:52 J	-2309154.27	-2309154.13	-2309153.97	0.0072	0.0030
Mercury	-11035-02-14 10:19 J	-2309066.22	-2309066.07	-2309065.90	0.0072	0.0021
Mercury	-11035-05-13 12:00 J	-2308978.16	-2308978.00	-2308977.84	0.0072	0.0011
Mercury	-11035-08-09 13:26 J	-2308890.10	-2308889.94	-2308889.77	0.0071	0.0002
Mercury	-11035-11-05 14:52 J	-2308802.04	-2308801.88	-2308801.71	0.0071	0.0007
Mercury	-11034-02-01 16:19 J	-2308713.98	-2308713.82	-2308713.66	0.0071	0.0016
Mercury	-11034-04-30 17:45 J	-2308625.91	-2308625.76	-2308625.61	0.0071	0.0024
Mercury	-11034-07-27 18:57 J	-2308537.85	-2308537.71	-2308537.56	0.0071	0.0033
Mercury	-11034-10-23 20:24 J	-2308449.77	-2308449.65	-2308449.51	0.0071	0.0042
Mercury	-11033-01-19 21:35 J	-2308361.70	-2308361.60	-2308361.47	0.0071	0.0051

Mercury -11033-04-16 23:02 J -2308273.62 -2308273.54 -2308273.44 0.0071 0.0059

Mercury -11033-07-14 00:14 J -2308185.52 -2308185.49 -2308185.43 0.0071 0.0068

# 11TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 11th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-10891-11-05 11:02 J	-2256206.13	-2256206.04	-2256205.91	0.0064	0.0056		
Venus	-10890-06-18 15:07 J	-2255981.06	-2255980.87	-2255980.65	0.0065	0.0022		
Venus	-10889-01-29 19:40 J	-2255755.89	-2255755.68	-2255755.47	0.0065	0.0013		
Venus	-10889-09-10 23:31 J	-2255530.65	-2255530.52	-2255530.36	0.0065	0.0048		
Earth	-10886-10-13 06:28 J	-2254403.44	-2254403.23	-2254403.00	0.0066	0.0035		
Moon	-10886-10-13 09:50 J	-2254403.30	-2254403.09	-2254402.87	0.0066	0.0035	*	
Mercury	-10874-07-31 07:26 J	-2250094.24	-2250094.19	-2250094.11	0.0072	0.0064		
Mercury	-10874-10-27 08:52 J	-2250006.22	-2250006.13	-2250006.03	0.0072	0.0055		
Mercury	-10873-01-23 09:50 J	-2249918.19	-2249918.09	-2249917.97	0.0072	0.0047		
Mercury	-10873-04-20 11:16 J	-2249830.16	-2249830.03	-2249829.90	0.0072	0.0038		
Mercury	-10873-07-17 12:14 J	-2249742.12	-2249741.99	-2249741.85	0.0072	0.0030		
Mercury	-10873-10-13 13:26 J	-2249654.08	-2249653.94	-2249653.79	0.0072	0.0022		
Mercury	-10872-01-09 14:52 J	-2249566.03	-2249565.88	-2249565.73	0.0072	0.0013		
Mercury	-10872-04-07 15:50 J	-2249477.99	-2249477.84	-2249477.68	0.0073	0.0005		
Mercury	-10872-07-04 17:16 J	-2249389.94	-2249389.78	-2249389.63	0.0073	0.0005		
Mercury	-10872-09-30 18:14 J	-2249301.88	-2249301.74	-2249301.58	0.0073	0.0014		

Mercury	-10872-12-27 19:26 J	-2249213.83	-2249213.69	-2249213.54	0.0073	0.0023
Mercury	-10871-03-25 20:38 J	-2249125.77	-2249125.64	-2249125.49	0.0073	0.0032
Mercury	-10871-06-21 21:50 J	-2249037.70	-2249037.59	-2249037.45	0.0073	0.0041
Mercury	-10871-09-17 23:16 J	-2248949.63	-2248949.53	-2248949.41	0.0073	0.0050
Mercury	-10871-12-15 00:28 J	-2248861.56	-2248861.48	-2248861.38	0.0073	0.0060
Mercury	-10870-03-13 01:55 J	-2248773.47	-2248773.42	-2248773.36	0.0074	0.0069
Venus	-10802-02-15 18:43 J	-2223961.76	-2223961.72	-2223961.63	0.0080	0.0076
Venus	-10802-09-29 05:45 J	-2223736.47	-2223736.26	-2223736.03	0.0079	0.0011
Venus	-10801-05-11 16:04 J	-2223510.97	-2223510.83	-2223510.65	0.0079	0.0055
Mars	-10799-05-07 12:28 J	-2222785.25	-2222784.98	-2222784.69	0.0078	0.0024
Mercury	-10789-09-30 12:28 J	-2218986.04	-2218985.98	-2218985.88	0.0072	0.0063
Mercury	-10789-12-27 14:09 J	-2218898.01	-2218897.91	-2218897.79	0.0072	0.0053
Mercury	-10788-03-25 15:35 J	-2218809.97	-2218809.85	-2218809.70	0.0072	0.0044
Mercury	-10788-06-21 17:31 J	-2218721.92	-2218721.77	-2218721.63	0.0072	0.0034
Mercury	-10788-09-17 18:43 J	-2218633.86	-2218633.72	-2218633.55	0.0072	0.0025
Mercury	-10788-12-14 20:24 J	-2218545.81	-2218545.65	-2218545.49	0.0072	0.0016
Mercury	-10787-03-12 21:50 J	-2218457.75	-2218457.59	-2218457.42	0.0072	0.0007
Mercury	-10787-06-08 23:16 J	-2218369.69	-2218369.53	-2218369.36	0.0071	0.0003
Mercury	-10787-09-05 00:43 J	-2218281.63	-2218281.47	-2218281.30	0.0071	0.0012
Mercury	-10787-12-02 01:55 J	-2218193.56	-2218193.42	-2218193.25	0.0071	0.0021
Mercury	-10786-02-28 03:35 J	-2218105.50	-2218105.35	-2218105.20	0.0071	0.0030
Mercury	-10786-05-27 05:02 J	-2218017.43	-2218017.29	-2218017.15	0.0071	0.0038
Mercury	-10786-08-23 06:14 J	-2217929.35	-2217929.24	-2217929.11	0.0071	0.0047
Mercury	-10786-11-19 07:26 J	-2217841.27	-2217841.19	-2217841.07	0.0071	0.0056
Mercury	-10785-02-15 09:07 J	-2217753.18	-2217753.12	-2217753.05	0.0071	0.0064
Venus	-10643-10-09 02:24 J	-2165651.53	-2165651.40	-2165651.21	0.0065	0.0044
Venus	-10642-05-22 07:11 J	-2165426.42	-2165426.20	-2165425.99	0.0065	0.0009
Venus	-10641-01-02 10:48 J	-2165201.23	-2165201.05	-2165200.83	0.0065	0.0026
Venus	-10641-08-14 14:52 J	-2164975.92	-2164975.88	-2164975.77	0.0065	0.0062
Mars	-10638-03-13 06:14 J	-2164035.56	-2164035.24	-2164034.88	0.0066	0.0011

Moon	-10638-10-15 05:02 J	-2163819.54	-2163819.29	-2163819.04	0.0067	0.0017
Earth	-10638-10-15 08:24 J	-2163819.39	-2163819.15	-2163818.89	0.0067	0.0014 *
Mercury	-10626-03-03 17:02 J	-2159661.84	-2159661.79	-2159661.71	0.0072	0.0065
Mercury	-10626-05-30 18:28 J	-2159573.82	-2159573.73	-2159573.64	0.0072	0.0056
Mercury	-10626-08-26 19:26 J	-2159485.79	-2159485.69	-2159485.57	0.0072	0.0048
Mercury	-10626-11-22 20:38 J	-2159397.76	-2159397.64	-2159397.51	0.0072	0.0039
Mercury	-10625-02-18 21:35 J	-2159309.72	-2159309.60	-2159309.45	0.0072	0.0032
Mercury	-10625-05-16 23:02 J	-2159221.68	-2159221.54	-2159221.39	0.0072	0.0022
Mercury	-10625-08-13 00:14 J	-2159133.64	-2159133.49	-2159133.34	0.0072	0.0014
Mercury	-10625-11-09 01:26 J	-2159045.59	-2159045.44	-2159045.28	0.0073	0.0005
Mercury	-10624-02-05 02:38 J	-2158957.54	-2158957.39	-2158957.23	0.0073	0.0004
Mercury	-10624-05-04 03:50 J	-2158869.49	-2158869.34	-2158869.19	0.0073	0.0013
Mercury	-10624-07-31 05:02 J	-2158781.43	-2158781.29	-2158781.14	0.0073	0.0022
Mercury	-10624-10-27 06:14 J	-2158693.37	-2158693.24	-2158693.09	0.0073	0.0031
Mercury	-10623-01-23 07:26 J	-2158605.31	-2158605.19	-2158605.05	0.0073	0.0041
Mercury	-10623-04-21 08:52 J	-2158517.24	-2158517.13	-2158517.02	0.0073	0.0050
Mercury	-10623-07-18 10:19 J	-2158429.16	-2158429.07	-2158428.98	0.0073	0.0059
Mercury	-10623-10-14 11:02 J	-2158341.07	-2158341.04	-2158340.97	0.0074	0.0069
Venus	-10554-01-19 13:40 J	-2133407.09	-2133406.93	-2133406.75	0.0079	0.0050
Venus	-10554-09-02 00:28 J	-2133181.69	-2133181.48	-2133181.25	0.0079	0.0016
Moon	-10551-04-19 03:35 J	-2132221.60	-2132221.35	-2132221.08	0.0078	0.0011
Earth	-10551-04-19 06:57 J	-2132221.46	-2132221.21	-2132220.94	0.0078	0.0011 *
Mercury	-10541-05-03 21:35 J	-2128553.66	-2128553.60	-2128553.52	0.0072	0.0065
Mercury	-10541-07-30 22:48 J	-2128465.63	-2128465.55	-2128465.42	0.0072	0.0056
Mercury	-10541-10-27 00:43 J	-2128377.59	-2128377.47	-2128377.33	0.0072	0.0045
Mercury	-10540-01-23 02:09 J	-2128289.54	-2128289.41	-2128289.26	0.0072	0.0036
Mercury	-10540-04-21 03:35 J	-2128201.49	-2128201.35	-2128201.18	0.0072	0.0027
Mercury	-10540-07-18 05:31 J	-2128113.43	-2128113.27	-2128113.11	0.0072	0.0017
Mercury	-10540-10-14 06:57 J	-2128025.37	-2128025.21	-2128025.05	0.0072	0.0008
Mercury	-10539-01-10 08:24 J	-2127937.31	-2127937.15	-2127936.98	0.0071	0.0001



Mercury	-10539-04-08 09:50 J	-2127849.25	-2127849.09	-2127848.93	0.0071	0.0011
Mercury	-10539-07-05 11:16 J	-2127761.19	-2127761.03	-2127760.87	0.0071	0.0020
Mercury	-10539-10-01 12:43 J	-2127673.12	-2127672.97	-2127672.82	0.0071	0.0028
Mercury	-10539-12-28 14:09 J	-2127585.05	-2127584.91	-2127584.77	0.0071	0.0037
Mercury	-10538-03-26 15:21 J	-2127496.97	-2127496.86	-2127496.73	0.0071	0.0046
Mercury	-10538-06-22 16:33 J	-2127408.90	-2127408.81	-2127408.69	0.0071	0.0055
Mercury	-10538-09-18 17:45 J	-2127320.81	-2127320.76	-2127320.67	0.0071	0.0064
Venus	-10395-01-29 15:50 J	-2075321.89	-2075321.84	-2075321.72	0.0065	0.0060
Venus	-10395-09-11 20:52 J	-2075096.83	-2075096.63	-2075096.43	0.0065	0.0025
Venus	-10394-04-25 00:57 J	-2074871.68	-2074871.46	-2074871.24	0.0065	0.0009
Venus	-10394-12-06 04:47 J	-2074646.44	-2074646.30	-2074646.13	0.0065	0.0045
Moon	-10391-10-15 21:21 J	-2073601.83	-2073601.61	-2073601.37	0.0066	0.0031
Earth	-10391-10-16 00:28 J	-2073601.69	-2073601.48	-2073601.23	0.0066	0.0028 *
Mercury	-10379-07-09 02:09 J	-2069317.42	-2069317.41	-2069317.36	0.0072	0.0070
Mercury	-10379-10-05 03:35 J	-2069229.42	-2069229.35	-2069229.27	0.0072	0.0061
Mercury	-10378-01-01 04:33 J	-2069141.40	-2069141.31	-2069141.20	0.0072	0.0053
Mercury	-10378-03-30 06:00 J	-2069053.37	-2069053.25	-2069053.13	0.0072	0.0044
Mercury	-10378-06-26 06:57 J	-2068965.33	-2068965.21	-2068965.07	0.0072	0.0036
Mercury	-10378-09-22 08:09 J	-2068877.29	-2068877.16	-2068877.01	0.0072	0.0028
Mercury	-10378-12-19 09:35 J	-2068789.25	-2068789.10	-2068788.96	0.0072	0.0019
Mercury	-10377-03-16 10:33 J	-2068701.20	-2068701.06	-2068700.90	0.0073	0.0010
Mercury	-10377-06-12 11:45 J	-2068613.16	-2068613.01	-2068612.85	0.0073	0.0003
Mercury	-10377-09-08 12:57 J	-2068525.11	-2068524.96	-2068524.80	0.0073	0.0008
Mercury	-10377-12-05 14:09 J	-2068437.05	-2068436.91	-2068436.75	0.0073	0.0017
Mercury	-10376-03-03 15:21 J	-2068348.99	-2068348.86	-2068348.71	0.0073	0.0026
Mercury	-10376-05-30 16:33 J	-2068260.93	-2068260.81	-2068260.67	0.0073	0.0035
Mercury	-10376-08-26 17:45 J	-2068172.87	-2068172.76	-2068172.63	0.0073	0.0045
Mercury	-10376-11-22 19:12 J	-2068084.80	-2068084.70	-2068084.59	0.0073	0.0054
Mercury	-10375-02-18 20:24 J	-2067996.72	-2067996.65	-2067996.57	0.0074	0.0063
Mercury	-10375-05-17 21:21 J	-2067908.61	-2067908.61	-2067908.56	0.0074	0.0073

Venus	-10307-05-12 01:26 J	-2043077.51	-2043077.44	-2043077.33	0.0080	0.0073
Venus	-10307-12-23 12:43 J	-2042852.19	-2042851.97	-2042851.75	0.0079	0.0007
Venus	-10306-08-05 23:02 J	-2042626.68	-2042626.54	-2042626.38	0.0079	0.0057
Moon	-10304-04-19 13:40 J	-2042004.00	-2042003.93	-2042003.81	0.0078	0.0073
Earth	-10304-04-19 16:33 J	-2042003.82	-2042003.81	-2042003.74	0.0078	0.0077 *
Mercury	-10294-09-09 06:14 J	-2038209.26	-2038209.24	-2038209.17	0.0072	0.0070
Mercury	-10294-12-06 07:55 J	-2038121.25	-2038121.17	-2038121.06	0.0072	0.0060
Mercury	-10293-03-03 09:50 J	-2038033.21	-2038033.09	-2038032.97	0.0072	0.0050
Mercury	-10293-05-30 11:16 J	-2037945.16	-2037945.03	-2037944.89	0.0072	0.0040
Mercury	-10293-08-26 12:43 J	-2037857.11	-2037856.97	-2037856.81	0.0072	0.0031
Mercury	-10293-11-22 14:24 J	-2037769.06	-2037768.90	-2037768.74	0.0072	0.0021
Mercury	-10292-02-18 15:50 J	-2037681.00	-2037680.84	-2037680.67	0.0072	0.0012
Mercury	-10292-05-17 17:31 J	-2037592.94	-2037592.77	-2037592.61	0.0072	0.0003
Mercury	-10292-08-13 18:57 J	-2037504.87	-2037504.71	-2037504.55	0.0071	0.0007
Mercury	-10292-11-09 20:24 J	-2037416.81	-2037416.65	-2037416.49	0.0071	0.0016
Mercury	-10291-02-05 21:50 J	-2037328.74	-2037328.59	-2037328.44	0.0071	0.0025
Mercury	-10291-05-04 23:02 J	-2037240.67	-2037240.54	-2037240.39	0.0071	0.0034
Mercury	-10291-08-01 00:43 J	-2037152.60	-2037152.47	-2037152.34	0.0071	0.0042
Mercury	-10291-10-28 01:55 J	-2037064.52	-2037064.42	-2037064.30	0.0071	0.0051
Mercury	-10290-01-24 03:07 J	-2036976.44	-2036976.37	-2036976.27	0.0071	0.0060
Mercury	-10290-04-22 04:33 J	-2036888.33	-2036888.31	-2036888.26	0.0071	0.0069
Venus	-10147-01-02 12:43 J	-1984767.14	-1984766.97	-1984766.77	0.0065	0.0033
Venus	-10147-08-15 17:16 J	-1984542.00	-1984541.78	-1984541.56	0.0065	0.0002
Venus	-10146-03-28 21:21 J	-1984316.78	-1984316.61	-1984316.42	0.0065	0.0037
Moon	-10144-10-16 19:12 J	-1983383.84	-1983383.70	-1983383.55	0.0066	0.0055
Earth	-10144-10-16 21:07 J	-1983383.74	-1983383.62	-1983383.45	0.0066	0.0055 *
Mars	-10144-11-08 13:26 J	-1983361.15	-1983360.94	-1983360.66	0.0066	0.0048
Earth	-10143-10-18 10:04 J	-1983017.23	-1983017.08	-1983016.87	0.0067	0.0048
Moon	-10143-10-18 13:26 J	-1983017.10	-1983016.94	-1983016.75	0.0067	0.0048 *
Mercury	-10132-11-13 12:43 J	-1978972.99	-1978972.97	-1978972.92	0.0072	0.0070

Mercury	-10131-02-09 13:40 J	-1978884.98	-1978884.93	-1978884.83	0.0072	0.0062
Mercury	-10131-05-08 15:07 J	-1978796.96	-1978796.87	-1978796.76	0.0072	0.0053
Mercury	-10131-08-04 16:04 J	-1978708.93	-1978708.83	-1978708.70	0.0072	0.0045
Mercury	-10131-10-31 17:31 J	-1978620.90	-1978620.77	-1978620.64	0.0072	0.0036
Mercury	-10130-01-27 18:43 J	-1978532.86	-1978532.72	-1978532.58	0.0072	0.0028
Mercury	-10130-04-25 19:40 J	-1978444.81	-1978444.68	-1978444.52	0.0072	0.0020
Mercury	-10130-07-22 21:07 J	-1978356.77	-1978356.62	-1978356.47	0.0073	0.0010
Mercury	-10130-10-18 22:19 J	-1978268.72	-1978268.57	-1978268.42	0.0073	0.0001
Mercury	-10129-01-14 23:31 J	-1978180.67	-1978180.52	-1978180.37	0.0073	0.0008
Mercury	-10129-04-12 00:28 J	-1978092.62	-1978092.48	-1978092.32	0.0073	0.0017
Mercury	-10129-07-09 01:40 J	-1978004.56	-1978004.43	-1978004.28	0.0073	0.0026
Mercury	-10129-10-05 02:52 J	-1977916.50	-1977916.38	-1977916.23	0.0073	0.0035
Mercury	-10128-01-01 04:04 J	-1977828.44	-1977828.33	-1977828.19	0.0073	0.0045
Mercury	-10128-03-30 05:31 J	-1977740.37	-1977740.27	-1977740.16	0.0073	0.0053
Mercury	-10128-06-26 06:43 J	-1977652.29	-1977652.22	-1977652.13	0.0074	0.0063
Mercury	-10128-09-22 07:55 J	-1977564.18	-1977564.17	-1977564.13	0.0074	0.0073
Venus	-10059-04-15 03:50 J	-1952522.55	-1952522.34	-1952522.12	0.0079	0.0020
Venus	-10059-11-26 13:55 J	-1952297.08	-1952296.92	-1952296.71	0.0079	0.0045
Mars	-10056-04-16 00:00 J	-1951425.62	-1951425.50	-1951425.31	0.0078	0.0067
Earth	-10056-04-22 10:04 J	-1951419.28	-1951419.08	-1951418.84	0.0078	0.0042
Moon	-10056-04-22 13:55 J	-1951419.13	-1951418.92	-1951418.71	0.0078	0.0044 *
Mercury	-10046-01-14 16:33 J	-1947864.85	-1947864.81	-1947864.76	0.0072	0.0070
Mercury	-10046-04-12 17:45 J	-1947776.83	-1947776.76	-1947776.65	0.0072	0.0060
Mercury	-10046-07-09 19:26 J	-1947688.79	-1947688.69	-1947688.56	0.0072	0.0051
Mercury	-10046-10-05 20:52 J	-1947600.75	-1947600.63	-1947600.47	0.0072	0.0041
Mercury	-10045-01-01 22:47 J	-1947512.70	-1947512.55	-1947512.40	0.0072	0.0031
Mercury	-10045-03-30 00:14 J	-1947424.64	-1947424.49	-1947424.33	0.0072	0.0022
Mercury	-10045-06-26 01:40 J	-1947336.58	-1947336.43	-1947336.26	0.0072	0.0013
Mercury	-10045-09-22 03:21 J	-1947248.52	-1947248.36	-1947248.19	0.0072	0.0003
Mercury	-10045-12-19 04:47 J	-1947160.46	-1947160.30	-1947160.13	0.0071	0.0006

Mercury -10044-03-17 06:14 J -1947072.40 -1947072.24 -1947072.07 0.0071 0.0015

Mercury -10044-06-13 07:40 J -1946984.33 -1946984.18 -1946984.02 0.0071 0.0024

Mercury -10044-09-09 09:07 J -1946896.26 -1946896.12 -1946895.97 0.0071 0.0033

Mercury -10044-12-06 10:33 J -1946808.19 -1946808.06 -1946807.92 0.0071 0.0042

Mercury -10043-03-04 11:45 J -1946720.11 -1946720.01 -1946719.88 0.0071 0.0051

Mercury -10043-05-31 13:12 J -1946632.02 -1946631.95 -1946631.85 0.0071 0.0060

Mercury -10043-08-27 14:24 J -1946543.92 -1946543.90 -1946543.84 0.0071 0.0069

# 10TH MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 10th millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-9900-04-25 07:12 J		-1894437.37	-1894437.20	-1894436.99	0.0065	0.0034	
Venus	-9900-12-06 11:45 J		-1894212.23	-1894212.01	-1894211.79	0.0065	0.0001	
Venus	-9899-07-19 16:04 J		-1893987.01	-1893986.83	-1893986.65	0.0065	0.0036	
Moon	-9897-10-17 20:52 J		-1893165.65	-1893165.63	-1893165.54	0.0066	0.0065	
Earth	-9896-10-19 11:02 J		-1892799.24	-1892799.04	-1892798.80	0.0067	0.0034	
Moon	-9896-10-19 13:26 J		-1892799.16	-1892798.94	-1892798.72	0.0067	0.0031	*
Mercury	-9884-03-21 00:14 J		-1888628.54	-1888628.49	-1888628.42	0.0072	0.0065	
Mercury	-9884-06-17 01:12 J		-1888540.52	-1888540.45	-1888540.34	0.0072	0.0057	
Mercury	-9884-09-13 02:38 J		-1888452.50	-1888452.39	-1888452.27	0.0072	0.0048	
Mercury	-9884-12-10 03:35 J		-1888364.46	-1888364.35	-1888364.21	0.0072	0.0040	
Mercury	-9883-03-08 04:47 J		-1888276.43	-1888276.30	-1888276.15	0.0072	0.0032	

Mercury	-9883-06-04 06:14 J	-1888188.38	-1888188.24	-1888188.10	0.0072	0.0023
Mercury	-9883-08-31 07:26 J	-1888100.34	-1888100.19	-1888100.04	0.0072	0.0014
Mercury	-9883-11-27 08:38 J	-1888012.29	-1888012.14	-1888011.99	0.0073	0.0005
Mercury	-9882-02-23 09:50 J	-1887924.24	-1887924.09	-1887923.94	0.0073	0.0004
Mercury	-9882-05-22 10:47 J	-1887836.19	-1887836.05	-1887835.89	0.0073	0.0013
Mercury	-9882-08-18 12:00 J	-1887748.14	-1887748.00	-1887747.85	0.0073	0.0022
Mercury	-9882-11-14 13:12 J	-1887660.08	-1887659.95	-1887659.80	0.0073	0.0031
Mercury	-9881-02-10 14:24 J	-1887572.01	-1887571.90	-1887571.76	0.0073	0.0041
Mercury	-9881-05-08 15:50 J	-1887483.95	-1887483.84	-1887483.73	0.0073	0.0050
Mercury	-9881-08-04 16:47 J	-1887395.87	-1887395.80	-1887395.69	0.0073	0.0059
Mercury	-9881-10-31 18:00 J	-1887307.78	-1887307.75	-1887307.68	0.0074	0.0069
Venus	-9813-12-23 13:26 J	-1862417.95	-1862417.94	-1862417.89	0.0080	0.0079
Venus	-9812-08-06 00:28 J	-1862192.70	-1862192.48	-1862192.26	0.0079	0.0013
Venus	-9811-03-19 10:33 J	-1861967.21	-1861967.06	-1861966.87	0.0079	0.0051
Earth	-9809-04-23 08:52 J	-1861201.37	-1861201.13	-1861200.87	0.0078	0.0023
Moon	-9809-04-23 11:02 J	-1861201.28	-1861201.04	-1861200.79	0.0078	0.0023 *
Mercury	-9799-05-22 04:19 J	-1857520.40	-1857520.32	-1857520.24	0.0072	0.0063
Mercury	-9799-08-18 05:31 J	-1857432.37	-1857432.27	-1857432.15	0.0072	0.0053
Mercury	-9799-11-14 07:12 J	-1857344.33	-1857344.20	-1857344.06	0.0072	0.0043
Mercury	-9798-02-10 08:38 J	-1857256.27	-1857256.14	-1857255.98	0.0072	0.0034
Mercury	-9798-05-09 10:19 J	-1857168.22	-1857168.07	-1857167.91	0.0072	0.0024
Mercury	-9798-08-05 11:45 J	-1857080.16	-1857080.01	-1857079.84	0.0072	0.0015
Mercury	-9798-11-01 13:26 J	-1856992.10	-1856991.94	-1856991.77	0.0072	0.0005
Mercury	-9797-01-28 14:52 J	-1856904.04	-1856903.88	-1856903.71	0.0071	0.0004
Mercury	-9797-04-25 16:19 J	-1856815.98	-1856815.82	-1856815.65	0.0071	0.0013
Mercury	-9797-07-22 17:45 J	-1856727.91	-1856727.76	-1856727.60	0.0071	0.0022
Mercury	-9797-10-18 19:12 J	-1856639.84	-1856639.70	-1856639.55	0.0071	0.0031
Mercury	-9796-01-14 20:38 J	-1856551.77	-1856551.64	-1856551.50	0.0071	0.0040
Mercury	-9796-04-12 21:50 J	-1856463.69	-1856463.59	-1856463.46	0.0071	0.0049
Mercury	-9796-07-09 23:16 J	-1856375.61	-1856375.53	-1856375.42	0.0071	0.0058

Mercury	-9796-10-06 00:28 J	-1856287.51	-1856287.48	-1856287.40	0.0071	0.0067
Venus	-9653-01-04 01:12 J	-1804332.52	-1804332.45	-1804332.37	0.0065	0.0060
Venus	-9653-08-16 05:16 J	-1804107.47	-1804107.28	-1804107.07	0.0065	0.0026
Venus	-9652-03-29 09:21 J	-1803882.31	-1803882.11	-1803881.88	0.0065	0.0010
Venus	-9652-11-09 13:12 J	-1803657.08	-1803656.95	-1803656.76	0.0065	0.0045
Earth	-9650-10-20 03:07 J	-1802947.38	-1802947.37	-1802947.29	0.0066	0.0066
Mars	-9649-07-08 12:28 J	-1802685.32	-1802684.98	-1802684.63	0.0066	0.0002
Earth	-9649-10-20 17:02 J	-1802581.00	-1802580.79	-1802580.57	0.0067	0.0036
Moon	-9649-10-20 17:02 J	-1802580.97	-1802580.79	-1802580.57	0.0067	0.0040 *
Mercury	-9637-04-29 11:31 J	-1798372.07	-1798372.02	-1798371.94	0.0072	0.0064
Mercury	-9637-07-26 12:57 J	-1798284.05	-1798283.96	-1798283.86	0.0072	0.0055
Mercury	-9637-10-22 13:55 J	-1798196.02	-1798195.92	-1798195.80	0.0072	0.0047
Mercury	-9636-01-18 15:07 J	-1798107.99	-1798107.87	-1798107.73	0.0072	0.0039
Mercury	-9636-04-16 16:04 J	-1798019.95	-1798019.83	-1798019.68	0.0072	0.0031
Mercury	-9636-07-13 17:31 J	-1797931.91	-1797931.77	-1797931.62	0.0072	0.0021
Mercury	-9636-10-09 18:43 J	-1797843.87	-1797843.72	-1797843.57	0.0073	0.0012
Mercury	-9635-01-05 19:55 J	-1797755.82	-1797755.67	-1797755.52	0.0073	0.0004
Mercury	-9635-04-03 21:07 J	-1797667.77	-1797667.62	-1797667.47	0.0073	0.0006
Mercury	-9635-06-30 22:19 J	-1797579.72	-1797579.57	-1797579.42	0.0073	0.0014
Mercury	-9635-09-26 23:31 J	-1797491.66	-1797491.52	-1797491.37	0.0073	0.0023
Mercury	-9635-12-24 00:28 J	-1797403.60	-1797403.48	-1797403.33	0.0073	0.0033
Mercury	-9634-03-22 01:40 J	-1797315.54	-1797315.43	-1797315.29	0.0073	0.0043
Mercury	-9634-06-18 03:07 J	-1797227.47	-1797227.37	-1797227.25	0.0073	0.0051
Mercury	-9634-09-14 04:19 J	-1797139.39	-1797139.32	-1797139.22	0.0073	0.0061
Mercury	-9634-12-11 05:16 J	-1797051.30	-1797051.28	-1797051.21	0.0074	0.0071
Venus	-9565-04-15 12:57 J	-1772088.08	-1772087.96	-1772087.80	0.0079	0.0062
Venus	-9565-11-27 00:00 J	-1771862.72	-1771862.50	-1771862.28	0.0079	0.0004
Venus	-9564-07-10 09:50 J	-1771637.18	-1771637.09	-1771636.95	0.0079	0.0068
Earth	-9562-04-25 12:14 J	-1770983.23	-1770982.99	-1770982.72	0.0078	0.0021
Moon	-9562-04-25 12:28 J	-1770983.22	-1770982.98	-1770982.73	0.0078	0.0018 *

Mercury	-9552-04-03 13:40 J	-1767351.94	-1767351.93	-1767351.90	0.0072	0.0072
Mercury	-9552-06-30 15:21 J	-1767263.94	-1767263.86	-1767263.77	0.0072	0.0062
Mercury	-9552-09-26 16:33 J	-1767175.91	-1767175.81	-1767175.68	0.0072	0.0052
Mercury	-9552-12-23 18:14 J	-1767087.86	-1767087.74	-1767087.59	0.0072	0.0042
Mercury	-9551-03-21 19:40 J	-1766999.81	-1766999.68	-1766999.52	0.0072	0.0033
Mercury	-9551-06-17 21:21 J	-1766911.76	-1766911.61	-1766911.44	0.0072	0.0023
Mercury	-9551-09-13 23:02 J	-1766823.70	-1766823.54	-1766823.37	0.0072	0.0014
Mercury	-9551-12-11 00:28 J	-1766735.64	-1766735.48	-1766735.31	0.0072	0.0005
Mercury	-9550-03-09 01:55 J	-1766647.58	-1766647.42	-1766647.25	0.0071	0.0006
Mercury	-9550-06-05 03:21 J	-1766559.51	-1766559.36	-1766559.19	0.0071	0.0015
Mercury	-9550-09-01 05:02 J	-1766471.45	-1766471.29	-1766471.13	0.0071	0.0024
Mercury	-9550-11-28 06:28 J	-1766383.38	-1766383.23	-1766383.08	0.0071	0.0033
Mercury	-9549-02-24 07:55 J	-1766295.30	-1766295.17	-1766295.04	0.0071	0.0041
Mercury	-9549-05-22 09:21 J	-1766207.22	-1766207.11	-1766207.00	0.0071	0.0050
Mercury	-9549-08-18 10:33 J	-1766119.14	-1766119.06	-1766118.96	0.0071	0.0059
Mercury	-9549-11-14 12:00 J	-1766031.03	-1766031.00	-1766030.95	0.0071	0.0068
Venus	-9406-04-27 00:28 J	-1714002.61	-1714002.48	-1714002.31	0.0065	0.0046
Venus	-9406-12-08 05:02 J	-1713777.50	-1713777.29	-1713777.07	0.0065	0.0011
Venus	-9405-07-20 09:21 J	-1713552.31	-1713552.11	-1713551.90	0.0065	0.0024
Venus	-9404-03-02 12:57 J	-1713327.02	-1713326.96	-1713326.84	0.0066	0.0060
Earth	-9403-10-21 13:12 J	-1712729.11	-1712728.95	-1712728.78	0.0066	0.0051
Moon	-9403-10-21 15:50 J	-1712729.00	-1712728.84	-1712728.64	0.0066	0.0049 *
Moon	-9402-10-23 00:57 J	-1712362.62	-1712362.46	-1712362.29	0.0067	0.0050
Earth	-9402-10-23 01:55 J	-1712362.57	-1712362.42	-1712362.24	0.0067	0.0051 *
Mercury	-9390-03-12 23:02 J	-1708203.58	-1708203.54	-1708203.47	0.0072	0.0066
Mercury	-9390-06-09 00:00 J	-1708115.57	-1708115.50	-1708115.39	0.0072	0.0058
Mercury	-9390-09-05 01:26 J	-1708027.54	-1708027.44	-1708027.33	0.0072	0.0049
Mercury	-9390-12-02 02:38 J	-1707939.51	-1707939.39	-1707939.26	0.0072	0.0041
Mercury	-9389-02-28 03:35 J	-1707851.47	-1707851.35	-1707851.21	0.0072	0.0032
Mercury	-9389-05-26 04:47 J	-1707763.43	-1707763.30	-1707763.15	0.0072	0.0024

Mercury	-9389-08-22 06:00 J	-1707675.39	-1707675.25	-1707675.10	0.0073	0.0015
Mercury	-9389-11-18 07:12 J	-1707587.35	-1707587.20	-1707587.04	0.0073	0.0006
Mercury	-9388-02-14 08:24 J	-1707499.30	-1707499.15	-1707498.99	0.0073	0.0004
Mercury	-9388-05-13 09:35 J	-1707411.25	-1707411.10	-1707410.95	0.0073	0.0012
Mercury	-9388-08-09 10:47 J	-1707323.19	-1707323.05	-1707322.90	0.0073	0.0021
Mercury	-9388-11-05 12:00 J	-1707235.13	-1707235.00	-1707234.86	0.0073	0.0030
Mercury	-9387-02-01 13:12 J	-1707147.07	-1707146.95	-1707146.82	0.0073	0.0040
Mercury	-9387-04-30 14:09 J	-1707059.00	-1707058.91	-1707058.78	0.0073	0.0050
Mercury	-9387-07-27 15:35 J	-1706970.93	-1706970.85	-1706970.75	0.0073	0.0058
Mercury	-9387-10-23 16:47 J	-1706882.84	-1706882.80	-1706882.73	0.0074	0.0068
Venus	-9318-08-07 18:00 J	-1681757.95	-1681757.75	-1681757.53	0.0079	0.0025
Venus	-9317-03-20 04:33 J	-1681532.50	-1681532.31	-1681532.11	0.0079	0.0039
Moon	-9315-04-26 21:50 J	-1680764.76	-1680764.59	-1680764.39	0.0078	0.0053
Earth	-9315-04-26 23:45 J	-1680764.70	-1680764.51	-1680764.30	0.0078	0.0049 *
Mars	-9315-05-06 16:19 J	-1680755.05	-1680754.82	-1680754.53	0.0078	0.0035
Mercury	-9305-05-13 02:09 J	-1677095.47	-1677095.41	-1677095.31	0.0072	0.0063
Mercury	-9305-08-09 03:50 J	-1677007.44	-1677007.34	-1677007.22	0.0072	0.0053
Mercury	-9305-11-05 05:31 J	-1676919.40	-1676919.27	-1676919.13	0.0072	0.0043
Mercury	-9304-02-01 06:57 J	-1676831.34	-1676831.21	-1676831.05	0.0072	0.0034
Mercury	-9304-04-30 08:38 J	-1676743.29	-1676743.14	-1676742.98	0.0072	0.0024
Mercury	-9304-07-27 10:04 J	-1676655.23	-1676655.08	-1676654.91	0.0072	0.0015
Mercury	-9304-10-23 11:45 J	-1676567.17	-1676567.01	-1676566.84	0.0072	0.0005
Mercury	-9303-01-19 13:12 J	-1676479.11	-1676478.95	-1676478.78	0.0072	0.0005
Mercury	-9303-04-17 14:52 J	-1676391.05	-1676390.88	-1676390.72	0.0071	0.0014
Mercury	-9303-07-14 16:04 J	-1676302.98	-1676302.83	-1676302.66	0.0071	0.0023
Mercury	-9303-10-10 17:31 J	-1676214.91	-1676214.77	-1676214.61	0.0071	0.0032
Mercury	-9302-01-06 18:57 J	-1676126.84	-1676126.71	-1676126.57	0.0071	0.0041
Mercury	-9302-04-04 20:24 J	-1676038.76	-1676038.65	-1676038.53	0.0071	0.0050
Mercury	-9302-07-01 21:35 J	-1675950.67	-1675950.60	-1675950.49	0.0071	0.0059
Mercury	-9302-09-27 23:02 J	-1675862.57	-1675862.54	-1675862.48	0.0071	0.0068



Venus	-9159-01-04 22:47 J	-1623897.63	-1623897.55	-1623897.44	0.0065	0.0058
Venus	-9159-08-18 03:07 J	-1623672.56	-1623672.37	-1623672.15	0.0065	0.0024
Venus	-9158-03-31 07:26 J	-1623447.39	-1623447.19	-1623446.96	0.0065	0.0011
Venus	-9158-11-11 11:31 J	-1623222.15	-1623222.02	-1623221.85	0.0066	0.0047
Earth	-9156-10-23 02:38 J	-1622510.62	-1622510.39	-1622510.14	0.0066	0.0023
Moon	-9156-10-23 06:43 J	-1622510.46	-1622510.22	-1622509.98	0.0066	0.0022 *
Mercury	-9143-01-23 11:31 J	-1618035.08	-1618035.02	-1618034.94	0.0072	0.0064
Mercury	-9143-04-21 12:43 J	-1617947.06	-1617946.97	-1617946.87	0.0072	0.0055
Mercury	-9143-07-18 13:40 J	-1617859.03	-1617858.93	-1617858.81	0.0072	0.0047
Mercury	-9143-10-14 14:52 J	-1617771.00	-1617770.88	-1617770.75	0.0072	0.0039
Mercury	-9142-01-10 15:50 J	-1617682.96	-1617682.84	-1617682.69	0.0072	0.0031
Mercury	-9142-04-08 17:02 J	-1617594.92	-1617594.79	-1617594.63	0.0072	0.0022
Mercury	-9142-07-05 18:28 J	-1617506.88	-1617506.73	-1617506.58	0.0073	0.0012
Mercury	-9142-10-01 19:40 J	-1617418.83	-1617418.68	-1617418.53	0.0073	0.0003
Mercury	-9142-12-28 20:52 J	-1617330.78	-1617330.63	-1617330.48	0.0073	0.0006
Mercury	-9141-03-25 21:50 J	-1617242.73	-1617242.59	-1617242.43	0.0073	0.0015
Mercury	-9141-06-21 23:02 J	-1617154.68	-1617154.54	-1617154.39	0.0073	0.0024
Mercury	-9141-09-18 00:14 J	-1617066.62	-1617066.49	-1617066.35	0.0073	0.0033
Mercury	-9141-12-15 01:26 J	-1616978.55	-1616978.44	-1616978.31	0.0073	0.0042
Mercury	-9140-03-13 02:38 J	-1616890.49	-1616890.39	-1616890.27	0.0073	0.0052
Mercury	-9140-06-09 04:04 J	-1616802.41	-1616802.33	-1616802.24	0.0074	0.0061
Mercury	-9140-09-05 05:02 J	-1616714.32	-1616714.29	-1616714.23	0.0074	0.0071
Venus	-9071-04-17 14:09 J	-1591653.07	-1591652.91	-1591652.71	0.0079	0.0046
Venus	-9071-11-29 00:57 J	-1591427.67	-1591427.46	-1591427.24	0.0079	0.0019
Earth	-9069-04-26 11:45 J	-1590913.01	-1590913.01	-1590912.99	0.0078	0.0078
Moon	-9069-04-26 14:52 J	-1590912.92	-1590912.88	-1590912.78	0.0078	0.0076
Mars	-9069-09-25 01:55 J	-1590761.58	-1590761.42	-1590761.19	0.0078	0.0059
Mercury	-9059-12-28 12:28 J	-1587014.99	-1587014.98	-1587014.94	0.0072	0.0072
Mercury	-9058-03-26 14:09 J	-1586926.98	-1586926.91	-1586926.81	0.0072	0.0061
Mercury	-9058-06-22 15:50 J	-1586838.95	-1586838.84	-1586838.71	0.0072	0.0051

Mercury	-9058-09-18 17:31 J	-1586750.90	-1586750.77	-1586750.63	0.0072	0.0042
Mercury	-9058-12-15 18:57 J	-1586662.85	-1586662.71	-1586662.55	0.0072	0.0032
Mercury	-9057-03-12 20:38 J	-1586574.79	-1586574.64	-1586574.48	0.0072	0.0022
Mercury	-9057-06-08 22:04 J	-1586486.74	-1586486.58	-1586486.41	0.0072	0.0013
Mercury	-9057-09-04 23:45 J	-1586398.67	-1586398.51	-1586398.34	0.0072	0.0003
Mercury	-9057-12-02 01:12 J	-1586310.61	-1586310.45	-1586310.28	0.0071	0.0007
Mercury	-9056-02-28 02:52 J	-1586222.54	-1586222.38	-1586222.22	0.0071	0.0016
Mercury	-9056-05-27 04:04 J	-1586134.48	-1586134.33	-1586134.17	0.0071	0.0025
Mercury	-9056-08-23 05:31 J	-1586046.40	-1586046.27	-1586046.11	0.0071	0.0034
Mercury	-9056-11-19 06:57 J	-1585958.33	-1585958.21	-1585958.07	0.0071	0.0043
Mercury	-9055-02-15 08:24 J	-1585870.25	-1585870.15	-1585870.03	0.0071	0.0052
Mercury	-9055-05-14 09:50 J	-1585782.16	-1585782.09	-1585782.00	0.0071	0.0061
Mercury	-9055-08-10 11:02 J	-1585694.04	-1585694.04	-1585694.00	0.0071	0.0070

# 9TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 9th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-8912-04-28 02:24 J	-1533567.58	-1533567.40	-1533567.20	0.0065	0.0032		
Venus	-8912-12-09 06:57 J	-1533342.43	-1533342.21	-1533341.99	0.0065	0.0003		
Venus	-8911-07-22 10:47 J	-1533117.20	-1533117.05	-1533116.85	0.0066	0.0039		
Earth	-8909-10-24 18:28 J	-1532291.96	-1532291.73	-1532291.46	0.0066	0.0015		
Moon	-8909-10-24 21:50 J	-1532291.83	-1532291.59	-1532291.33	0.0066	0.0011	*	

Mercury	-8897-09-08 23:31 J	-1527954.56	-1527954.52	-1527954.47	0.0072	0.0067
Mercury	-8897-12-06 00:28 J	-1527866.55	-1527866.48	-1527866.39	0.0072	0.0059
Mercury	-8896-03-04 01:40 J	-1527778.53	-1527778.43	-1527778.32	0.0072	0.0050
Mercury	-8896-05-31 02:38 J	-1527690.50	-1527690.39	-1527690.26	0.0072	0.0042
Mercury	-8896-08-27 03:50 J	-1527602.46	-1527602.34	-1527602.20	0.0072	0.0034
Mercury	-8896-11-23 05:02 J	-1527514.42	-1527514.29	-1527514.14	0.0072	0.0025
Mercury	-8895-02-19 06:14 J	-1527426.38	-1527426.24	-1527426.09	0.0073	0.0016
Mercury	-8895-05-18 07:26 J	-1527338.34	-1527338.19	-1527338.04	0.0073	0.0007
Mercury	-8895-08-14 08:38 J	-1527250.29	-1527250.14	-1527249.99	0.0073	0.0002
Mercury	-8895-11-10 09:50 J	-1527162.24	-1527162.09	-1527161.94	0.0073	0.0011
Mercury	-8894-02-06 11:02 J	-1527074.18	-1527074.04	-1527073.89	0.0073	0.0020
Mercury	-8894-05-05 12:14 J	-1526986.13	-1526985.99	-1526985.85	0.0073	0.0029
Mercury	-8894-08-01 13:26 J	-1526898.07	-1526897.94	-1526897.81	0.0073	0.0039
Mercury	-8894-10-28 14:24 J	-1526810.00	-1526809.90	-1526809.77	0.0073	0.0048
Mercury	-8893-01-24 15:35 J	-1526721.93	-1526721.85	-1526721.74	0.0074	0.0058
Mercury	-8893-04-21 17:02 J	-1526633.84	-1526633.79	-1526633.72	0.0074	0.0067
Venus	-8825-12-26 14:09 J	-1501548.06	-1501547.91	-1501547.72	0.0079	0.0052
Venus	-8824-08-09 00:57 J	-1501322.67	-1501322.46	-1501322.23	0.0079	0.0013
Venus	-8823-03-22 11:31 J	-1501097.07	-1501097.02	-1501096.96	0.0079	0.0076
Earth	-8822-04-29 08:38 J	-1500694.39	-1500694.14	-1500693.87	0.0078	0.0013
Moon	-8822-04-29 11:31 J	-1500694.26	-1500694.02	-1500693.76	0.0078	0.0013 *
Mercury	-8812-11-10 01:40 J	-1496846.49	-1496846.43	-1496846.33	0.0072	0.0064
Mercury	-8811-02-06 03:21 J	-1496758.46	-1496758.36	-1496758.23	0.0072	0.0054
Mercury	-8811-05-05 05:02 J	-1496670.41	-1496670.29	-1496670.15	0.0072	0.0044
Mercury	-8811-08-01 06:28 J	-1496582.36	-1496582.23	-1496582.07	0.0072	0.0034
Mercury	-8811-10-28 08:09 J	-1496494.31	-1496494.16	-1496493.99	0.0072	0.0024
Mercury	-8810-01-24 09:50 J	-1496406.25	-1496406.09	-1496405.92	0.0072	0.0014
Mercury	-8810-04-22 11:31 J	-1496318.19	-1496318.02	-1496317.85	0.0072	0.0005
Mercury	-8810-07-19 12:57 J	-1496230.12	-1496229.96	-1496229.79	0.0072	0.0005
Mercury	-8810-10-15 14:24 J	-1496142.06	-1496141.90	-1496141.73	0.0071	0.0014

Mercury	-8809-01-11 15:50 J	-1496053.99	-1496053.84	-1496053.68	0.0071	0.0024
Mercury	-8809-04-08 17:31 J	-1495965.92	-1495965.77	-1495965.62	0.0071	0.0033
Mercury	-8809-07-05 18:28 J	-1495877.84	-1495877.73	-1495877.58	0.0071	0.0043
Mercury	-8809-10-01 19:55 J	-1495789.76	-1495789.67	-1495789.53	0.0071	0.0051
Mercury	-8809-12-28 21:21 J	-1495701.68	-1495701.61	-1495701.50	0.0071	0.0060
Mercury	-8808-03-26 22:47 J	-1495613.57	-1495613.55	-1495613.49	0.0071	0.0069
Venus	-8665-01-07 03:35 J	-1443462.52	-1443462.35	-1443462.15	0.0065	0.0034
Venus	-8665-08-19 08:24 J	-1443237.37	-1443237.15	-1443236.93	0.0065	0.0001
Venus	-8664-04-01 12:14 J	-1443012.15	-1443011.99	-1443011.79	0.0066	0.0037
Earth	-8663-10-26 00:43 J	-1442439.66	-1442439.47	-1442439.26	0.0066	0.0041
Moon	-8663-10-26 00:43 J	-1442439.64	-1442439.47	-1442439.24	0.0066	0.0044 *
Earth	-8662-10-27 13:12 J	-1442073.02	-1442072.95	-1442072.82	0.0067	0.0062
Moon	-8662-10-27 15:07 J	-1442072.90	-1442072.87	-1442072.79	0.0067	0.0065 *
Mars	-8662-12-18 01:55 J	-1442021.68	-1442021.42	-1442021.11	0.0067	0.0037
Mercury	-8650-04-26 12:14 J	-1437874.04	-1437873.99	-1437873.94	0.0072	0.0067
Mercury	-8650-07-23 12:57 J	-1437786.03	-1437785.96	-1437785.86	0.0072	0.0059
Mercury	-8650-10-19 14:24 J	-1437698.00	-1437697.90	-1437697.79	0.0072	0.0050
Mercury	-8649-01-15 15:21 J	-1437609.97	-1437609.86	-1437609.73	0.0072	0.0042
Mercury	-8649-04-12 16:33 J	-1437521.94	-1437521.81	-1437521.67	0.0072	0.0033
Mercury	-8649-07-09 17:45 J	-1437433.90	-1437433.76	-1437433.62	0.0072	0.0025
Mercury	-8649-10-05 18:57 J	-1437345.86	-1437345.71	-1437345.56	0.0073	0.0016
Mercury	-8648-01-01 20:09 J	-1437257.81	-1437257.66	-1437257.51	0.0073	0.0007
Mercury	-8648-03-30 21:21 J	-1437169.76	-1437169.61	-1437169.46	0.0073	0.0002
Mercury	-8648-06-26 22:33 J	-1437081.71	-1437081.56	-1437081.41	0.0073	0.0011
Mercury	-8648-09-22 23:31 J	-1436993.66	-1436993.52	-1436993.37	0.0073	0.0020
Mercury	-8648-12-20 00:43 J	-1436905.60	-1436905.47	-1436905.33	0.0073	0.0030
Mercury	-8647-03-18 02:09 J	-1436817.54	-1436817.41	-1436817.29	0.0073	0.0039
Mercury	-8647-06-14 02:52 J	-1436729.48	-1436729.38	-1436729.25	0.0073	0.0049
Mercury	-8647-09-10 04:19 J	-1436641.40	-1436641.32	-1436641.22	0.0074	0.0058
Mercury	-8647-12-07 05:45 J	-1436553.32	-1436553.26	-1436553.20	0.0074	0.0067

Venus	-8578-09-06 16:19 J	-1411442.98	-1411442.82	-1411442.65	0.0079	0.0053
Venus	-8577-04-19 02:52 J	-1411217.60	-1411217.38	-1411217.16	0.0079	0.0011
Venus	-8577-11-30 12:28 J	-1410992.02	-1410991.98	-1410991.88	0.0079	0.0075
Earth	-8575-05-01 06:57 J	-1410475.34	-1410475.21	-1410475.02	0.0078	0.0061
Moon	-8575-05-01 08:24 J	-1410475.29	-1410475.15	-1410474.96	0.0078	0.0058 *
Mercury	-8565-06-26 13:55 J	-1406765.99	-1406765.92	-1406765.83	0.0072	0.0064
Mercury	-8565-09-22 15:35 J	-1406677.96	-1406677.85	-1406677.73	0.0072	0.0054
Mercury	-8565-12-19 17:16 J	-1406589.91	-1406589.78	-1406589.65	0.0072	0.0044
Mercury	-8564-03-17 18:28 J	-1406501.86	-1406501.73	-1406501.57	0.0072	0.0034
Mercury	-8564-06-13 20:24 J	-1406413.81	-1406413.65	-1406413.49	0.0072	0.0024
Mercury	-8564-09-09 21:50 J	-1406325.75	-1406325.59	-1406325.42	0.0072	0.0015
Mercury	-8564-12-06 23:31 J	-1406237.69	-1406237.52	-1406237.35	0.0072	0.0005
Mercury	-8563-03-05 00:57 J	-1406149.62	-1406149.46	-1406149.29	0.0072	0.0005
Mercury	-8563-06-01 02:24 J	-1406061.56	-1406061.40	-1406061.23	0.0071	0.0014
Mercury	-8563-08-28 03:50 J	-1405973.49	-1405973.34	-1405973.17	0.0071	0.0024
Mercury	-8563-11-24 05:31 J	-1405885.42	-1405885.27	-1405885.12	0.0071	0.0033
Mercury	-8562-02-20 06:43 J	-1405797.34	-1405797.22	-1405797.07	0.0071	0.0042
Mercury	-8562-05-19 08:09 J	-1405709.26	-1405709.16	-1405709.03	0.0071	0.0051
Mercury	-8562-08-15 09:35 J	-1405621.17	-1405621.10	-1405621.00	0.0071	0.0060
Mercury	-8562-11-11 11:02 J	-1405533.06	-1405533.04	-1405532.99	0.0071	0.0069
Venus	-8419-09-17 06:00 J	-1353357.42	-1353357.25	-1353357.04	0.0065	0.0034
Venus	-8418-04-30 10:47 J	-1353132.27	-1353132.05	-1353131.84	0.0065	0.0002
Venus	-8418-12-11 14:38 J	-1352907.05	-1352906.89	-1352906.69	0.0066	0.0037
Earth	-8416-10-27 20:52 J	-1352220.87	-1352220.63	-1352220.36	0.0066	0.0012
Moon	-8416-10-27 23:16 J	-1352220.78	-1352220.53	-1352220.26	0.0066	0.0014 *
Mars	-8415-05-08 10:33 J	-1352028.39	-1352028.06	-1352027.70	0.0067	0.0004
Mercury	-8404-12-11 00:43 J	-1347793.51	-1347793.47	-1347793.39	0.0072	0.0066
Mercury	-8403-03-09 01:55 J	-1347705.50	-1347705.42	-1347705.32	0.0072	0.0057
Mercury	-8403-06-05 03:21 J	-1347617.47	-1347617.36	-1347617.25	0.0072	0.0048
Mercury	-8403-09-01 04:04 J	-1347529.44	-1347529.33	-1347529.19	0.0072	0.0041

Mercury	-8403-11-28 05:16 J	-1347441.40	-1347441.28	-1347441.13	0.0072	0.0032
Mercury	-8402-02-24 06:43 J	-1347353.36	-1347353.22	-1347353.08	0.0072	0.0023
Mercury	-8402-05-23 07:55 J	-1347265.32	-1347265.17	-1347265.03	0.0073	0.0014
Mercury	-8402-08-19 08:52 J	-1347177.28	-1347177.13	-1347176.98	0.0073	0.0005
Mercury	-8402-11-15 10:04 J	-1347089.23	-1347089.08	-1347088.93	0.0073	0.0004
Mercury	-8401-02-11 11:16 J	-1347001.18	-1347001.03	-1347000.88	0.0073	0.0013
Mercury	-8401-05-09 12:28 J	-1346913.12	-1346912.98	-1346912.84	0.0073	0.0022
Mercury	-8401-08-05 13:40 J	-1346825.06	-1346824.93	-1346824.79	0.0073	0.0031
Mercury	-8401-11-01 14:52 J	-1346737.00	-1346736.88	-1346736.75	0.0073	0.0041
Mercury	-8400-01-28 15:50 J	-1346648.94	-1346648.84	-1346648.72	0.0073	0.0050
Mercury	-8400-04-26 17:02 J	-1346560.86	-1346560.79	-1346560.69	0.0074	0.0060
Mercury	-8400-07-23 18:14 J	-1346472.77	-1346472.74	-1346472.68	0.0074	0.0070
Venus	-8331-05-17 19:55 J	-1321337.84	-1321337.67	-1321337.48	0.0079	0.0046
Venus	-8331-12-29 06:14 J	-1321112.44	-1321112.24	-1321112.01	0.0079	0.0019
Earth	-8329-05-01 06:43 J	-1320623.46	-1320623.22	-1320622.96	0.0078	0.0022
Moon	-8329-05-01 09:21 J	-1320623.35	-1320623.11	-1320622.84	0.0078	0.0026 *
Mercury	-8319-11-15 00:57 J	-1316773.48	-1316773.46	-1316773.40	0.0073	0.0071
Mercury	-8318-02-11 02:38 J	-1316685.46	-1316685.39	-1316685.28	0.0072	0.0060
Mercury	-8318-05-10 04:19 J	-1316597.43	-1316597.32	-1316597.19	0.0072	0.0050
Mercury	-8318-08-06 06:00 J	-1316509.38	-1316509.25	-1316509.10	0.0072	0.0040
Mercury	-8318-11-02 07:40 J	-1316421.33	-1316421.18	-1316421.02	0.0072	0.0030
Mercury	-8317-01-29 09:21 J	-1316333.27	-1316333.11	-1316332.95	0.0072	0.0020
Mercury	-8317-04-26 10:47 J	-1316245.21	-1316245.05	-1316244.88	0.0072	0.0011
Mercury	-8317-07-23 12:28 J	-1316157.15	-1316156.98	-1316156.81	0.0072	0.0001
Mercury	-8317-10-19 13:55 J	-1316069.08	-1316068.92	-1316068.75	0.0072	0.0009
Mercury	-8316-01-15 15:35 J	-1315981.01	-1315980.85	-1315980.69	0.0071	0.0018
Mercury	-8316-04-13 16:47 J	-1315892.94	-1315892.80	-1315892.64	0.0071	0.0027
Mercury	-8316-07-10 18:14 J	-1315804.87	-1315804.74	-1315804.59	0.0071	0.0037
Mercury	-8316-10-06 19:55 J	-1315716.79	-1315716.67	-1315716.54	0.0071	0.0046
Mercury	-8315-01-02 21:07 J	-1315628.71	-1315628.62	-1315628.50	0.0071	0.0055

Mercury	-8315-03-31 22:33 J	-1315540.62	-1315540.56	-1315540.47	0.0071	0.0064
Venus	-8173-10-15 06:14 J	-1263477.29	-1263477.24	-1263477.14	0.0065	0.0061
Venus	-8172-05-28 10:47 J	-1263252.24	-1263252.05	-1263251.84	0.0065	0.0026
Venus	-8171-01-08 15:21 J	-1263027.08	-1263026.86	-1263026.64	0.0066	0.0009
Venus	-8171-08-21 19:12 J	-1262801.83	-1262801.70	-1262801.51	0.0066	0.0045
Moon	-8170-10-29 04:47 J	-1262368.52	-1262368.30	-1262368.04	0.0066	0.0025
Earth	-8170-10-29 08:09 J	-1262368.37	-1262368.16	-1262367.90	0.0066	0.0027 *
Mars	-8169-09-27 02:52 J	-1262034.72	-1262034.38	-1262034.04	0.0067	0.0010
Mercury	-8157-04-30 13:40 J	-1257800.96	-1257800.93	-1257800.87	0.0072	0.0068
Mercury	-8157-07-27 15:07 J	-1257712.95	-1257712.87	-1257712.79	0.0072	0.0059
Mercury	-8157-10-23 15:50 J	-1257624.93	-1257624.84	-1257624.72	0.0072	0.0051
Mercury	-8156-01-19 17:02 J	-1257536.90	-1257536.79	-1257536.66	0.0072	0.0043
Mercury	-8156-04-17 18:14 J	-1257448.87	-1257448.74	-1257448.60	0.0072	0.0034
Mercury	-8156-07-14 19:12 J	-1257360.83	-1257360.70	-1257360.55	0.0072	0.0026
Mercury	-8156-10-10 20:24 J	-1257272.79	-1257272.65	-1257272.49	0.0073	0.0017
Mercury	-8155-01-06 21:35 J	-1257184.74	-1257184.60	-1257184.44	0.0073	0.0008
Mercury	-8155-04-04 22:47 J	-1257096.70	-1257096.55	-1257096.40	0.0073	0.0003
Mercury	-8155-07-02 00:00 J	-1257008.65	-1257008.50	-1257008.35	0.0073	0.0011
Mercury	-8155-09-28 01:12 J	-1256920.59	-1256920.45	-1256920.30	0.0073	0.0020
Mercury	-8155-12-25 02:09 J	-1256832.54	-1256832.41	-1256832.26	0.0073	0.0029
Mercury	-8154-03-23 03:21 J	-1256744.48	-1256744.36	-1256744.22	0.0073	0.0039
Mercury	-8154-06-19 04:47 J	-1256656.41	-1256656.30	-1256656.18	0.0073	0.0048
Mercury	-8154-09-15 05:45 J	-1256568.34	-1256568.26	-1256568.15	0.0073	0.0057
Mercury	-8154-12-12 06:57 J	-1256480.26	-1256480.21	-1256480.13	0.0074	0.0067
Venus	-8084-01-26 01:55 J	-1231232.61	-1231232.42	-1231232.20	0.0079	0.0032
Venus	-8084-09-08 12:28 J	-1231007.17	-1231006.98	-1231006.76	0.0079	0.0032
Earth	-8082-05-04 12:14 J	-1230404.00	-1230403.99	-1230403.91	0.0078	0.0077
Mercury	-8072-07-01 14:38 J	-1226692.95	-1226692.89	-1226692.80	0.0072	0.0065
Mercury	-8072-09-27 16:19 J	-1226604.92	-1226604.82	-1226604.70	0.0072	0.0054
Mercury	-8072-12-24 18:00 J	-1226516.87	-1226516.75	-1226516.61	0.0072	0.0044

Mercury	-8071-03-22 19:40 J	-1226428.82	-1226428.68	-1226428.53	0.0072	0.0034
Mercury	-8071-06-18 21:21 J	-1226340.77	-1226340.61	-1226340.45	0.0072	0.0024
Mercury	-8071-09-14 22:47 J	-1226252.71	-1226252.55	-1226252.38	0.0072	0.0015
Mercury	-8071-12-12 00:28 J	-1226164.65	-1226164.48	-1226164.31	0.0072	0.0005
Mercury	-8070-03-10 02:09 J	-1226076.58	-1226076.41	-1226076.25	0.0072	0.0005
Mercury	-8070-06-06 03:21 J	-1225988.51	-1225988.36	-1225988.19	0.0071	0.0015
Mercury	-8070-09-02 05:02 J	-1225900.44	-1225900.29	-1225900.13	0.0071	0.0024
Mercury	-8070-11-29 06:14 J	-1225812.37	-1225812.24	-1225812.08	0.0071	0.0034
Mercury	-8069-02-25 07:55 J	-1225724.30	-1225724.17	-1225724.03	0.0071	0.0042
Mercury	-8069-05-23 09:35 J	-1225636.22	-1225636.10	-1225635.99	0.0071	0.0051
Mercury	-8069-08-19 10:33 J	-1225548.13	-1225548.06	-1225547.96	0.0071	0.0061
Mercury	-8069-11-15 12:00 J	-1225460.01	-1225460.00	-1225459.95	0.0071	0.0070

# 8TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 8th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-7926-06-26 12:00 J	-1173372.11	-1173372.00	-1173371.83	0.0065	0.0051		
Venus	-7925-02-06 16:47 J	-1173147.01	-1173146.80	-1173146.58	0.0065	0.0015		
Venus	-7925-09-18 21:07 J	-1172921.81	-1172921.62	-1172921.40	0.0066	0.0021		
Venus	-7924-05-02 01:26 J	-1172696.53	-1172696.44	-1172696.31	0.0066	0.0056		
Moon	-7924-10-29 21:21 J	-1172515.71	-1172515.61	-1172515.45	0.0066	0.0057		
Earth	-7924-10-29 22:19 J	-1172515.70	-1172515.57	-1172515.43	0.0066	0.0056 *		



Moon	-7923-10-31 09:07 J	-1172149.30	-1172149.12	-1172148.93	0.0066	0.0047
Earth	-7923-10-31 10:47 J	-1172149.21	-1172149.05	-1172148.84	0.0066	0.0046 *
Mars	-7922-02-17 00:43 J	-1172040.79	-1172040.47	-1172040.11	0.0067	0.0014
Mercury	-7911-09-19 03:07 J	-1167808.40	-1167808.37	-1167808.31	0.0072	0.0068
Mercury	-7911-12-16 04:19 J	-1167720.39	-1167720.32	-1167720.23	0.0072	0.0059
Mercury	-7910-03-14 05:31 J	-1167632.37	-1167632.27	-1167632.16	0.0072	0.0051
Mercury	-7910-06-10 06:28 J	-1167544.34	-1167544.23	-1167544.10	0.0072	0.0042
Mercury	-7910-09-06 07:40 J	-1167456.31	-1167456.18	-1167456.04	0.0072	0.0033
Mercury	-7910-12-03 08:52 J	-1167368.27	-1167368.13	-1167367.99	0.0072	0.0025
Mercury	-7909-02-29 10:04 J	-1167280.23	-1167280.08	-1167279.94	0.0073	0.0016
Mercury	-7909-05-27 11:02 J	-1167192.18	-1167192.04	-1167191.89	0.0073	0.0007
Mercury	-7909-08-23 12:14 J	-1167104.14	-1167103.99	-1167103.84	0.0073	0.0002
Mercury	-7909-11-19 13:26 J	-1167016.09	-1167015.94	-1167015.79	0.0073	0.0011
Mercury	-7908-02-15 14:38 J	-1166928.04	-1166927.89	-1166927.75	0.0073	0.0020
Mercury	-7908-05-14 15:50 J	-1166839.98	-1166839.84	-1166839.70	0.0073	0.0030
Mercury	-7908-08-10 16:33 J	-1166751.92	-1166751.81	-1166751.67	0.0073	0.0040
Mercury	-7908-11-06 18:00 J	-1166663.86	-1166663.75	-1166663.63	0.0073	0.0048
Mercury	-7907-02-02 19:12 J	-1166575.78	-1166575.70	-1166575.60	0.0074	0.0058
Mercury	-7907-05-01 20:09 J	-1166487.70	-1166487.66	-1166487.58	0.0074	0.0068
Venus	-7838-02-24 00:14 J	-1141352.56	-1141352.49	-1141352.36	0.0079	0.0071
Venus	-7838-10-07 11:31 J	-1141127.24	-1141127.02	-1141126.80	0.0079	0.0006
Venus	-7837-05-19 21:50 J	-1140901.74	-1140901.59	-1140901.44	0.0079	0.0057
Moon	-7836-05-04 18:57 J	-1140551.96	-1140551.71	-1140551.45	0.0078	0.0027
Earth	-7836-05-04 20:24 J	-1140551.88	-1140551.65	-1140551.38	0.0078	0.0026 *
Mercury	-7826-11-20 03:35 J	-1136700.41	-1136700.35	-1136700.26	0.0072	0.0064
Mercury	-7825-02-16 05:16 J	-1136612.38	-1136612.28	-1136612.15	0.0072	0.0054
Mercury	-7825-05-14 06:57 J	-1136524.33	-1136524.21	-1136524.06	0.0072	0.0043
Mercury	-7825-08-10 08:38 J	-1136436.28	-1136436.14	-1136435.98	0.0072	0.0033
Mercury	-7825-11-06 10:19 J	-1136348.22	-1136348.07	-1136347.91	0.0072	0.0023
Mercury	-7824-02-02 11:45 J	-1136260.16	-1136260.01	-1136259.83	0.0072	0.0014

Mercury	-7824-05-01 13:26 J	-1136172.10	-1136171.94	-1136171.77	0.0072	0.0004
Mercury	-7824-07-28 15:07 J	-1136084.04	-1136083.87	-1136083.70	0.0072	0.0006
Mercury	-7824-10-24 16:33 J	-1135995.97	-1135995.81	-1135995.64	0.0071	0.0015
Mercury	-7823-01-20 18:14 J	-1135907.90	-1135907.74	-1135907.59	0.0071	0.0025
Mercury	-7823-04-18 19:26 J	-1135819.83	-1135819.69	-1135819.53	0.0071	0.0034
Mercury	-7823-07-15 21:07 J	-1135731.75	-1135731.62	-1135731.49	0.0071	0.0043
Mercury	-7823-10-11 22:19 J	-1135643.67	-1135643.57	-1135643.45	0.0071	0.0053
Mercury	-7822-01-07 23:45 J	-1135555.57	-1135555.51	-1135555.41	0.0071	0.0062
Mercury	-7822-04-06 01:40 J	-1135467.43	-1135467.43	-1135467.43	0.0071	0.0071
Venus	-7679-03-06 20:52 J	-1083266.80	-1083266.63	-1083266.42	0.0065	0.0031
Venus	-7679-10-18 01:40 J	-1083041.65	-1083041.43	-1083041.21	0.0066	0.0004
Venus	-7678-05-31 05:45 J	-1082816.42	-1082816.26	-1082816.07	0.0066	0.0040
Moon	-7677-11-01 02:38 J	-1082296.59	-1082296.39	-1082296.15	0.0066	0.0033
Earth	-7677-11-01 05:31 J	-1082296.50	-1082296.27	-1082296.04	0.0066	0.0030 *
Mars	-7676-07-09 08:38 J	-1082046.47	-1082046.14	-1082045.78	0.0067	0.0007
Mercury	-7665-11-10 16:33 J	-1077903.82	-1077903.81	-1077903.78	0.0072	0.0071
Mercury	-7664-02-06 17:45 J	-1077815.83	-1077815.76	-1077815.68	0.0072	0.0062
Mercury	-7664-05-05 18:43 J	-1077727.81	-1077727.72	-1077727.61	0.0072	0.0054
Mercury	-7664-08-01 19:55 J	-1077639.78	-1077639.67	-1077639.55	0.0072	0.0045
Mercury	-7664-10-28 21:07 J	-1077551.75	-1077551.62	-1077551.49	0.0072	0.0037
Mercury	-7663-01-24 22:04 J	-1077463.71	-1077463.58	-1077463.43	0.0072	0.0028
Mercury	-7663-04-22 23:16 J	-1077375.67	-1077375.53	-1077375.38	0.0072	0.0019
Mercury	-7663-07-20 00:28 J	-1077287.63	-1077287.48	-1077287.33	0.0073	0.0010
Mercury	-7663-10-16 01:40 J	-1077199.58	-1077199.43	-1077199.28	0.0073	0.0001
Mercury	-7662-01-12 02:52 J	-1077111.53	-1077111.38	-1077111.23	0.0073	0.0008
Mercury	-7662-04-10 03:50 J	-1077023.48	-1077023.34	-1077023.19	0.0073	0.0017
Mercury	-7662-07-07 05:02 J	-1076935.42	-1076935.29	-1076935.14	0.0073	0.0026
Mercury	-7662-10-03 06:14 J	-1076847.37	-1076847.24	-1076847.10	0.0073	0.0035
Mercury	-7662-12-30 07:26 J	-1076759.30	-1076759.19	-1076759.07	0.0073	0.0045
Mercury	-7661-03-27 08:24 J	-1076671.24	-1076671.15	-1076671.04	0.0073	0.0055

Mercury	-7661-06-23 09:50 J	-1076583.16	-1076583.09	-1076583.01	0.0074	0.0064
Mercury	-7661-09-19 11:02 J	-1076495.04	-1076495.04	-1076495.02	0.0074	0.0073
Venus	-7592-11-04 13:12 J	-1051247.15	-1051246.95	-1051246.75	0.0079	0.0032
Venus	-7591-06-17 23:31 J	-1051021.72	-1051021.52	-1051021.31	0.0079	0.0031
Moon	-7590-05-06 06:28 J	-1050699.48	-1050699.23	-1050698.97	0.0078	0.0008
Earth	-7590-05-06 09:21 J	-1050699.37	-1050699.11	-1050698.85	0.0078	0.0009 *
Mercury	-7579-01-11 16:04 J	-1046795.87	-1046795.83	-1046795.76	0.0072	0.0069
Mercury	-7579-04-09 17:45 J	-1046707.85	-1046707.76	-1046707.65	0.0072	0.0058
Mercury	-7579-07-06 19:26 J	-1046619.81	-1046619.69	-1046619.55	0.0072	0.0048
Mercury	-7579-10-02 21:07 J	-1046531.76	-1046531.62	-1046531.47	0.0072	0.0038
Mercury	-7579-12-29 22:47 J	-1046443.70	-1046443.55	-1046443.39	0.0072	0.0028
Mercury	-7578-03-28 00:28 J	-1046355.64	-1046355.48	-1046355.32	0.0072	0.0018
Mercury	-7578-06-24 01:55 J	-1046267.58	-1046267.42	-1046267.25	0.0072	0.0009
Mercury	-7578-09-20 03:36 J	-1046179.52	-1046179.35	-1046179.18	0.0072	0.0002
Mercury	-7578-12-17 05:16 J	-1046091.45	-1046091.28	-1046091.12	0.0072	0.0011
Mercury	-7577-03-14 06:43 J	-1046003.38	-1046003.22	-1046003.06	0.0071	0.0021
Mercury	-7577-06-10 07:55 J	-1045915.31	-1045915.17	-1045915.00	0.0071	0.0031
Mercury	-7577-09-06 09:36 J	-1045827.23	-1045827.10	-1045826.95	0.0071	0.0039
Mercury	-7577-12-03 11:16 J	-1045739.15	-1045739.03	-1045738.91	0.0071	0.0049
Mercury	-7576-03-01 12:28 J	-1045651.06	-1045650.98	-1045650.87	0.0071	0.0058
Mercury	-7576-05-28 13:55 J	-1045562.96	-1045562.92	-1045562.85	0.0071	0.0067
Venus	-7433-04-04 01:55 J	-993386.57	-993386.42	-993386.25	0.0065	0.0045
Venus	-7433-11-15 06:14 J	-993161.45	-993161.24	-993161.01	0.0066	0.0010
Venus	-7432-06-28 10:47 J	-992936.25	-992936.05	-992935.85	0.0066	0.0026
Venus	-7431-02-08 14:52 J	-992710.93	-992710.88	-992710.79	0.0066	0.0062
Earth	-7431-11-03 00:14 J	-992443.73	-992443.49	-992443.24	0.0066	0.0018
Moon	-7431-11-03 03:07 J	-992443.59	-992443.37	-992443.11	0.0066	0.0022 *
Mars	-7430-11-29 18:14 J	-992052.01	-992051.74	-992051.41	0.0067	0.0032
Mercury	-7418-04-01 07:26 J	-987911.25	-987911.19	-987911.12	0.0072	0.0064
Mercury	-7418-06-28 08:23 J	-987823.23	-987823.15	-987823.04	0.0072	0.0056

Mercury	-7418-09-24 09:36 J	-987735.20	-987735.10	-987734.98	0.0072	0.0047
Mercury	-7418-12-21 10:47 J	-987647.17	-987647.05	-987646.92	0.0072	0.0039
Mercury	-7417-03-18 12:00 J	-987559.14	-987559.00	-987558.87	0.0072	0.0030
Mercury	-7417-06-14 12:57 J	-987471.10	-987470.96	-987470.81	0.0072	0.0021
Mercury	-7417-09-10 14:09 J	-987383.05	-987382.91	-987382.76	0.0073	0.0012
Mercury	-7417-12-07 15:21 J	-987295.01	-987294.86	-987294.71	0.0073	0.0003
Mercury	-7416-03-05 16:33 J	-987206.96	-987206.81	-987206.66	0.0073	0.0006
Mercury	-7416-06-01 17:31 J	-987118.91	-987118.77	-987118.62	0.0073	0.0015
Mercury	-7416-08-28 18:43 J	-987030.86	-987030.72	-987030.58	0.0073	0.0024
Mercury	-7416-11-24 19:55 J	-986942.80	-986942.67	-986942.53	0.0073	0.0033
Mercury	-7415-02-20 20:52 J	-986854.74	-986854.63	-986854.50	0.0073	0.0043
Mercury	-7415-05-19 22:04 J	-986766.67	-986766.58	-986766.46	0.0073	0.0053
Mercury	-7415-08-15 23:31 J	-986678.60	-986678.52	-986678.44	0.0074	0.0062
Mercury	-7415-11-12 00:28 J	-986590.50	-986590.48	-986590.43	0.0074	0.0072
Venus	-7346-12-03 17:45 J	-961366.93	-961366.76	-961366.59	0.0079	0.0051
Venus	-7345-07-16 04:04 J	-961141.55	-961141.33	-961141.11	0.0079	0.0013
Venus	-7344-02-26 13:55 J	-960915.95	-960915.92	-960915.84	0.0078	0.0076
Earth	-7344-05-07 01:40 J	-960846.67	-960846.43	-960846.18	0.0078	0.0028
Moon	-7344-05-07 04:47 J	-960846.53	-960846.30	-960846.05	0.0078	0.0029 *
Mercury	-7333-03-05 05:16 J	-956891.31	-956891.28	-956891.21	0.0073	0.0070
Mercury	-7333-06-01 06:57 J	-956803.29	-956803.21	-956803.10	0.0072	0.0059
Mercury	-7333-08-28 09:07 J	-956715.25	-956715.12	-956715.00	0.0072	0.0049
Mercury	-7333-11-24 10:33 J	-956627.20	-956627.06	-956626.91	0.0072	0.0039
Mercury	-7332-02-20 12:00 J	-956539.14	-956539.00	-956538.83	0.0072	0.0029
Mercury	-7332-05-19 13:40 J	-956451.09	-956450.93	-956450.76	0.0072	0.0019
Mercury	-7332-08-15 15:21 J	-956363.02	-956362.86	-956362.69	0.0072	0.0009
Mercury	-7332-11-11 17:02 J	-956274.96	-956274.79	-956274.62	0.0072	0.0001
Mercury	-7331-02-07 18:28 J	-956186.89	-956186.73	-956186.56	0.0072	0.0011
Mercury	-7331-05-06 19:55 J	-956098.82	-956098.67	-956098.50	0.0071	0.0020
Mercury	-7331-08-02 21:36 J	-956010.75	-956010.60	-956010.45	0.0071	0.0030

Mercury	-7331-10-29 22:47 J	-955922.68	-955922.55	-955922.40	0.0071	0.0039
Mercury	-7330-01-26 00:28 J	-955834.60	-955834.48	-955834.35	0.0071	0.0048
Mercury	-7330-04-24 01:40 J	-955746.51	-955746.43	-955746.32	0.0071	0.0058
Mercury	-7330-07-21 03:07 J	-955658.40	-955658.37	-955658.30	0.0071	0.0067
Venus	-7187-05-03 09:21 J	-903506.23	-903506.11	-903505.97	0.0065	0.0052
Venus	-7187-12-14 13:40 J	-903281.13	-903280.93	-903280.71	0.0066	0.0017
Venus	-7186-07-27 18:14 J	-903055.94	-903055.74	-903055.52	0.0066	0.0019
Venus	-7185-03-08 22:33 J	-902830.66	-902830.56	-902830.43	0.0066	0.0055
Earth	-7185-11-03 23:16 J	-902590.76	-902590.53	-902590.27	0.0066	0.0018
Moon	-7185-11-04 00:28 J	-902590.72	-902590.48	-902590.22	0.0066	0.0022 *
Mercury	-7172-02-24 20:52 J	-898094.65	-898094.63	-898094.59	0.0072	0.0070
Mercury	-7172-05-23 21:50 J	-898006.65	-898006.59	-898006.50	0.0072	0.0062
Mercury	-7172-08-19 23:02 J	-897918.63	-897918.54	-897918.43	0.0072	0.0053
Mercury	-7172-11-16 00:14 J	-897830.60	-897830.49	-897830.37	0.0072	0.0045
Mercury	-7171-02-12 01:12 J	-897742.57	-897742.45	-897742.31	0.0072	0.0036
Mercury	-7171-05-11 02:23 J	-897654.53	-897654.40	-897654.26	0.0072	0.0027
Mercury	-7171-08-07 03:36 J	-897566.49	-897566.35	-897566.20	0.0073	0.0018
Mercury	-7171-11-03 04:47 J	-897478.45	-897478.30	-897478.15	0.0073	0.0009
Mercury	-7170-01-30 06:00 J	-897390.40	-897390.25	-897390.10	0.0073	0.0002
Mercury	-7170-04-28 06:57 J	-897302.35	-897302.21	-897302.06	0.0073	0.0009
Mercury	-7170-07-25 08:09 J	-897214.30	-897214.16	-897214.01	0.0073	0.0018
Mercury	-7170-10-21 09:07 J	-897126.25	-897126.12	-897125.97	0.0073	0.0027
Mercury	-7169-01-17 10:19 J	-897038.19	-897038.07	-897037.93	0.0073	0.0037
Mercury	-7169-04-14 11:31 J	-896950.13	-896950.02	-896949.89	0.0073	0.0046
Mercury	-7169-07-11 12:28 J	-896862.06	-896861.98	-896861.86	0.0073	0.0056
Mercury	-7169-10-07 13:55 J	-896773.98	-896773.92	-896773.84	0.0074	0.0065
Venus	-7099-01-01 00:14 J	-871486.61	-871486.49	-871486.33	0.0079	0.0060
Venus	-7099-08-14 11:02 J	-871261.26	-871261.04	-871260.81	0.0079	0.0004
Venus	-7098-03-27 20:52 J	-871035.73	-871035.63	-871035.49	0.0078	0.0066
Earth	-7098-05-08 22:04 J	-870993.80	-870993.58	-870993.32	0.0078	0.0033

Moon	-7098-05-08 23:02 J	-870993.77	-870993.54	-870993.28	0.0078	0.0034 *
Mercury	-7087-04-27 19:26 J	-866986.73	-866986.69	-866986.61	0.0073	0.0068
Mercury	-7087-07-24 21:07 J	-866898.71	-866898.62	-866898.50	0.0072	0.0057
Mercury	-7087-10-20 23:02 J	-866810.66	-866810.54	-866810.41	0.0072	0.0047
Mercury	-7086-01-17 00:43 J	-866722.61	-866722.47	-866722.32	0.0072	0.0037
Mercury	-7086-04-15 02:23 J	-866634.56	-866634.40	-866634.24	0.0072	0.0026
Mercury	-7086-07-12 03:50 J	-866546.50	-866546.34	-866546.17	0.0072	0.0017
Mercury	-7086-10-08 05:31 J	-866458.43	-866458.27	-866458.10	0.0072	0.0007
Mercury	-7085-01-04 07:12 J	-866370.37	-866370.20	-866370.03	0.0072	0.0003
Mercury	-7085-04-01 08:38 J	-866282.30	-866282.14	-866281.97	0.0072	0.0013
Mercury	-7085-06-28 10:04 J	-866194.23	-866194.08	-866193.91	0.0071	0.0023
Mercury	-7085-09-24 11:31 J	-866106.16	-866106.02	-866105.86	0.0071	0.0032
Mercury	-7085-12-21 13:12 J	-866018.08	-866017.95	-866017.81	0.0071	0.0041
Mercury	-7084-03-19 14:23 J	-865930.00	-865929.90	-865929.77	0.0071	0.0051
Mercury	-7084-06-15 16:04 J	-865841.91	-865841.83	-865841.73	0.0071	0.0060
Mercury	-7084-09-11 17:31 J	-865753.79	-865753.77	-865753.73	0.0071	0.0069

# 7TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 7th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-6941-05-31 16:19 J	-813625.89	-813625.82	-813625.70	0.0065	0.0059		
Venus	-6940-01-11 20:52 J	-813400.82	-813400.63	-813400.41	0.0066	0.0024		

Venus	-6940-08-25 01:40 J	-813175.64	-813175.43	-813175.21	0.0066	0.0013
Venus	-6939-04-07 06:14 J	-812950.38	-812950.24	-812950.09	0.0066	0.0049
Moon	-6939-11-05 19:12 J	-812737.94	-812737.70	-812737.46	0.0066	0.0023
Earth	-6939-11-05 22:33 J	-812737.79	-812737.56	-812737.30	0.0066	0.0020 *
Mercury	-6926-04-19 11:31 J	-808190.05	-808190.02	-808189.96	0.0072	0.0068
Mercury	-6926-07-16 12:43 J	-808102.04	-808101.97	-808101.88	0.0072	0.0059
Mercury	-6926-10-12 13:55 J	-808014.02	-808013.92	-808013.81	0.0072	0.0051
Mercury	-6925-01-08 14:52 J	-807925.99	-807925.88	-807925.75	0.0072	0.0042
Mercury	-6925-04-05 15:50 J	-807837.96	-807837.84	-807837.69	0.0072	0.0034
Mercury	-6925-07-02 17:02 J	-807749.92	-807749.79	-807749.64	0.0072	0.0025
Mercury	-6925-09-28 18:14 J	-807661.88	-807661.74	-807661.59	0.0073	0.0016
Mercury	-6925-12-25 19:26 J	-807573.84	-807573.69	-807573.54	0.0073	0.0007
Mercury	-6924-03-23 20:38 J	-807485.79	-807485.64	-807485.49	0.0073	0.0003
Mercury	-6924-06-19 21:36 J	-807397.74	-807397.60	-807397.45	0.0073	0.0012
Mercury	-6924-09-15 22:47 J	-807309.69	-807309.55	-807309.40	0.0073	0.0021
Mercury	-6924-12-12 23:45 J	-807221.64	-807221.51	-807221.36	0.0073	0.0030
Mercury	-6923-03-11 00:57 J	-807133.58	-807133.46	-807133.33	0.0073	0.0040
Mercury	-6923-06-07 02:23 J	-807045.51	-807045.40	-807045.29	0.0073	0.0049
Mercury	-6923-09-03 03:07 J	-806957.44	-806957.37	-806957.26	0.0074	0.0059
Mercury	-6923-11-30 04:33 J	-806869.36	-806869.31	-806869.25	0.0074	0.0068
Venus	-6853-01-30 08:09 J	-781606.27	-781606.16	-781606.02	0.0079	0.0066
Venus	-6853-09-11 18:57 J	-781380.93	-781380.71	-781380.49	0.0079	0.0002
Venus	-6852-04-25 04:47 J	-781155.42	-781155.30	-781155.14	0.0078	0.0061
Moon	-6852-05-09 17:02 J	-781141.03	-781140.79	-781140.56	0.0078	0.0034
Earth	-6852-05-09 20:09 J	-781140.89	-781140.66	-781140.41	0.0078	0.0030 *
Mars	-6851-04-06 22:04 J	-780808.82	-780808.58	-780808.34	0.0078	0.0043
Mercury	-6841-06-19 10:19 J	-777082.15	-777082.07	-777081.98	0.0072	0.0063
Mercury	-6841-09-15 12:00 J	-776994.11	-776994.00	-776993.88	0.0072	0.0053
Mercury	-6841-12-12 13:26 J	-776906.06	-776905.94	-776905.79	0.0072	0.0043
Mercury	-6840-03-10 15:07 J	-776818.01	-776817.87	-776817.71	0.0072	0.0033

Mercury	-6840-06-06 16:47 J	-776729.95	-776729.80	-776729.63	0.0072	0.0022
Mercury	-6840-09-02 18:28 J	-776641.89	-776641.73	-776641.56	0.0072	0.0012
Mercury	-6840-11-29 20:09 J	-776553.83	-776553.66	-776553.49	0.0072	0.0002
Mercury	-6839-02-25 21:50 J	-776465.76	-776465.59	-776465.42	0.0072	0.0008
Mercury	-6839-05-24 23:16 J	-776377.69	-776377.53	-776377.36	0.0072	0.0017
Mercury	-6839-08-21 00:28 J	-776289.62	-776289.48	-776289.31	0.0071	0.0028
Mercury	-6839-11-17 02:09 J	-776201.54	-776201.41	-776201.25	0.0071	0.0037
Mercury	-6838-02-13 03:36 J	-776113.46	-776113.35	-776113.21	0.0071	0.0046
Mercury	-6838-05-12 05:16 J	-776025.37	-776025.28	-776025.17	0.0071	0.0055
Mercury	-6838-08-08 06:28 J	-775937.28	-775937.23	-775937.14	0.0071	0.0065
Venus	-6695-06-30 02:09 J	-723745.50	-723745.41	-723745.30	0.0065	0.0058
Venus	-6694-02-10 06:28 J	-723520.42	-723520.23	-723520.01	0.0066	0.0023
Venus	-6694-09-23 11:31 J	-723295.23	-723295.02	-723294.81	0.0066	0.0013
Venus	-6693-05-05 15:36 J	-723069.97	-723069.85	-723069.69	0.0066	0.0050
Earth	-6693-11-07 01:40 J	-722884.65	-722884.43	-722884.20	0.0066	0.0033
Moon	-6693-11-07 01:40 J	-722884.62	-722884.43	-722884.20	0.0066	0.0036 *
Mercury	-6680-03-15 02:23 J	-718373.43	-718373.40	-718373.36	0.0072	0.0069
Mercury	-6680-06-11 03:07 J	-718285.43	-718285.37	-718285.28	0.0072	0.0061
Mercury	-6680-09-07 04:19 J	-718197.41	-718197.32	-718197.21	0.0072	0.0052
Mercury	-6680-12-04 05:31 J	-718109.38	-718109.27	-718109.15	0.0072	0.0044
Mercury	-6679-03-02 06:43 J	-718021.35	-718021.22	-718021.09	0.0072	0.0035
Mercury	-6679-05-29 07:40 J	-717933.31	-717933.18	-717933.04	0.0072	0.0026
Mercury	-6679-08-25 08:38 J	-717845.27	-717845.14	-717844.99	0.0073	0.0018
Mercury	-6679-11-21 09:50 J	-717757.23	-717757.09	-717756.93	0.0073	0.0009
Mercury	-6678-02-17 11:02 J	-717669.18	-717669.04	-717668.89	0.0073	0.0002
Mercury	-6678-05-16 12:14 J	-717581.14	-717580.99	-717580.84	0.0073	0.0010
Mercury	-6678-08-12 13:26 J	-717493.08	-717492.94	-717492.80	0.0073	0.0019
Mercury	-6678-11-08 14:23 J	-717405.03	-717404.90	-717404.76	0.0073	0.0029
Mercury	-6677-02-04 15:21 J	-717316.97	-717316.86	-717316.72	0.0073	0.0039
Mercury	-6677-05-02 16:33 J	-717228.91	-717228.81	-717228.68	0.0073	0.0048



Mercury	-6677-07-29 18:00 J	-717140.84	-717140.75	-717140.65	0.0074	0.0057
Mercury	-6677-10-25 18:57 J	-717052.76	-717052.71	-717052.63	0.0074	0.0067
Venus	-6607-02-27 18:57 J	-691725.84	-691725.71	-691725.57	0.0079	0.0061
Venus	-6607-10-11 05:31 J	-691500.49	-691500.27	-691500.05	0.0079	0.0002
Earth	-6606-05-11 22:19 J	-691287.82	-691287.57	-691287.30	0.0078	0.0013
Moon	-6606-05-11 23:31 J	-691287.76	-691287.52	-691287.27	0.0078	0.0016 *
Venus	-6606-05-24 15:07 J	-691274.97	-691274.87	-691274.72	0.0078	0.0065
Mars	-6605-08-28 20:09 J	-690812.89	-690812.66	-690812.41	0.0078	0.0044
Mercury	-6595-05-15 23:45 J	-687265.57	-687265.51	-687265.43	0.0073	0.0066
Mercury	-6595-08-12 01:12 J	-687177.54	-687177.45	-687177.32	0.0072	0.0056
Mercury	-6595-11-08 03:21 J	-687089.49	-687089.36	-687089.23	0.0072	0.0045
Mercury	-6594-02-04 04:47 J	-687001.44	-687001.30	-687001.14	0.0072	0.0035
Mercury	-6594-05-03 06:28 J	-686913.38	-686913.23	-686913.06	0.0072	0.0025
Mercury	-6594-07-30 08:09 J	-686825.32	-686825.16	-686824.99	0.0072	0.0014
Mercury	-6594-10-26 09:50 J	-686737.26	-686737.09	-686736.92	0.0072	0.0004
Mercury	-6593-01-22 11:31 J	-686649.19	-686649.02	-686648.85	0.0072	0.0006
Mercury	-6593-04-19 12:57 J	-686561.12	-686560.96	-686560.79	0.0072	0.0015
Mercury	-6593-07-16 14:38 J	-686473.05	-686472.89	-686472.73	0.0071	0.0025
Mercury	-6593-10-12 16:04 J	-686384.97	-686384.83	-686384.68	0.0071	0.0034
Mercury	-6592-01-08 17:16 J	-686296.89	-686296.78	-686296.63	0.0071	0.0044
Mercury	-6592-04-06 18:57 J	-686208.81	-686208.71	-686208.59	0.0071	0.0054
Mercury	-6592-07-03 20:09 J	-686120.71	-686120.66	-686120.56	0.0071	0.0063
Venus	-6449-07-28 11:45 J	-633865.09	-633865.01	-633864.89	0.0065	0.0058
Venus	-6448-03-10 16:04 J	-633640.01	-633639.83	-633639.60	0.0066	0.0023
Venus	-6448-10-21 21:07 J	-633414.84	-633414.62	-633414.41	0.0066	0.0013
Moon	-6448-11-07 11:31 J	-633398.11	-633398.02	-633397.85	0.0066	0.0057
Earth	-6448-11-07 15:07 J	-633397.97	-633397.87	-633397.69	0.0066	0.0055 *
Venus	-6447-06-04 01:26 J	-633189.57	-633189.44	-633189.29	0.0066	0.0050
Earth	-6447-11-09 03:50 J	-633031.49	-633031.34	-633031.13	0.0066	0.0046
Moon	-6447-11-09 07:12 J	-633031.35	-633031.20	-633030.99	0.0066	0.0049 *

Mars	-6446-08-03 04:33 J	-632764.54	-632764.31	-632764.02	0.0067	0.0045
Mercury	-6434-02-08 16:33 J	-628556.82	-628556.81	-628556.77	0.0072	0.0071
Mercury	-6434-05-07 17:45 J	-628468.82	-628468.76	-628468.68	0.0072	0.0062
Mercury	-6434-08-03 18:43 J	-628380.80	-628380.72	-628380.61	0.0072	0.0054
Mercury	-6434-10-30 19:55 J	-628292.78	-628292.67	-628292.55	0.0072	0.0045
Mercury	-6433-01-26 20:52 J	-628204.75	-628204.63	-628204.49	0.0072	0.0037
Mercury	-6433-04-23 22:04 J	-628116.71	-628116.58	-628116.44	0.0072	0.0028
Mercury	-6433-07-20 23:16 J	-628028.67	-628028.53	-628028.38	0.0073	0.0019
Mercury	-6433-10-17 00:28 J	-627940.63	-627940.48	-627940.33	0.0073	0.0010
Mercury	-6432-01-13 01:26 J	-627852.58	-627852.44	-627852.29	0.0073	0.0002
Mercury	-6432-04-11 02:38 J	-627764.54	-627764.39	-627764.24	0.0073	0.0008
Mercury	-6432-07-08 03:50 J	-627676.49	-627676.34	-627676.20	0.0073	0.0017
Mercury	-6432-10-04 04:47 J	-627588.43	-627588.30	-627588.16	0.0073	0.0027
Mercury	-6432-12-31 05:45 J	-627500.38	-627500.26	-627500.12	0.0073	0.0037
Mercury	-6431-03-29 07:12 J	-627412.31	-627412.20	-627412.08	0.0073	0.0046
Mercury	-6431-06-25 08:09 J	-627324.25	-627324.16	-627324.05	0.0073	0.0055
Mercury	-6431-09-21 09:21 J	-627236.17	-627236.11	-627236.03	0.0074	0.0065
Venus	-6361-03-28 05:31 J	-601845.40	-601845.27	-601845.09	0.0079	0.0056
Venus	-6361-11-08 16:19 J	-601620.04	-601619.82	-601619.60	0.0079	0.0008
Earth	-6360-05-13 01:12 J	-601434.71	-601434.45	-601434.18	0.0078	0.0009
Moon	-6360-05-13 04:19 J	-601434.59	-601434.32	-601434.05	0.0078	0.0005 *
Venus	-6360-06-22 02:23 J	-601394.49	-601394.40	-601394.30	0.0078	0.0070
Mercury	-6349-04-10 13:40 J	-597448.98	-597448.93	-597448.85	0.0073	0.0067
Mercury	-6349-07-07 15:21 J	-597360.95	-597360.86	-597360.74	0.0072	0.0057
Mercury	-6349-10-03 17:02 J	-597272.91	-597272.79	-597272.65	0.0072	0.0046
Mercury	-6349-12-30 18:57 J	-597184.86	-597184.71	-597184.56	0.0072	0.0036
Mercury	-6348-03-28 20:38 J	-597096.80	-597096.64	-597096.48	0.0072	0.0025
Mercury	-6348-06-24 22:19 J	-597008.74	-597008.57	-597008.41	0.0072	0.0015
Mercury	-6348-09-20 23:45 J	-596920.67	-596920.51	-596920.34	0.0072	0.0006
Mercury	-6348-12-18 01:26 J	-596832.61	-596832.44	-596832.27	0.0072	0.0005

Mercury	-6347-03-16 02:52 J	-596744.54	-596744.38	-596744.21	0.0072	0.0015
Mercury	-6347-06-12 04:19 J	-596656.47	-596656.32	-596656.15	0.0071	0.0025
Mercury	-6347-09-08 06:14 J	-596568.39	-596568.24	-596568.09	0.0071	0.0034
Mercury	-6347-12-05 07:26 J	-596480.31	-596480.19	-596480.04	0.0071	0.0044
Mercury	-6346-03-03 08:52 J	-596392.23	-596392.13	-596392.00	0.0071	0.0053
Mercury	-6346-05-30 10:33 J	-596304.13	-596304.06	-596303.97	0.0071	0.0062
Venus	-6203-08-27 00:14 J	-543984.62	-543984.49	-543984.33	0.0066	0.0050
Venus	-6202-04-09 05:02 J	-543759.51	-543759.29	-543759.08	0.0066	0.0014
Earth	-6202-11-09 22:47 J	-543544.77	-543544.55	-543544.31	0.0066	0.0028
Moon	-6202-11-09 23:02 J	-543544.75	-543544.54	-543544.30	0.0066	0.0029 *
Venus	-6202-11-20 09:07 J	-543534.31	-543534.12	-543533.90	0.0066	0.0022
Venus	-6201-07-02 13:26 J	-543309.02	-543308.94	-543308.81	0.0066	0.0059
Mars	-6200-12-24 18:14 J	-542768.96	-542768.74	-542768.43	0.0067	0.0043
Mercury	-6188-01-04 07:55 J	-538740.19	-538740.17	-538740.10	0.0072	0.0068
Mercury	-6188-04-02 09:07 J	-538652.19	-538652.12	-538652.02	0.0072	0.0059
Mercury	-6188-06-29 10:19 J	-538564.16	-538564.07	-538563.96	0.0072	0.0051
Mercury	-6188-09-25 11:31 J	-538476.14	-538476.02	-538475.90	0.0072	0.0042
Mercury	-6188-12-22 12:28 J	-538388.10	-538387.98	-538387.84	0.0072	0.0033
Mercury	-6187-03-20 13:26 J	-538300.07	-538299.94	-538299.79	0.0072	0.0025
Mercury	-6187-06-16 14:38 J	-538212.03	-538211.89	-538211.74	0.0073	0.0016
Mercury	-6187-09-12 15:50 J	-538123.98	-538123.84	-538123.69	0.0073	0.0007
Mercury	-6187-12-09 17:02 J	-538035.94	-538035.79	-538035.64	0.0073	0.0003
Mercury	-6186-03-07 18:00 J	-537947.89	-537947.75	-537947.60	0.0073	0.0012
Mercury	-6186-06-03 19:12 J	-537859.84	-537859.70	-537859.55	0.0073	0.0021
Mercury	-6186-08-30 20:23 J	-537771.78	-537771.65	-537771.51	0.0073	0.0030
Mercury	-6186-11-26 21:36 J	-537683.73	-537683.60	-537683.48	0.0073	0.0040
Mercury	-6185-02-22 22:33 J	-537595.66	-537595.56	-537595.44	0.0073	0.0049
Mercury	-6185-05-20 23:45 J	-537507.59	-537507.51	-537507.42	0.0074	0.0059
Mercury	-6185-08-17 00:43 J	-537419.51	-537419.47	-537419.40	0.0074	0.0069
Venus	-6115-04-26 20:23 J	-511964.84	-511964.65	-511964.45	0.0079	0.0038

Venus	-6115-12-08 06:43 J	-511739.43	-511739.22	-511739.00	0.0078	0.0025
Moon	-6114-05-15 06:57 J	-511581.41	-511581.21	-511580.97	0.0078	0.0047
Earth	-6114-05-15 09:50 J	-511581.28	-511581.09	-511580.88	0.0078	0.0050 *
Mercury	-6103-03-07 04:48 J	-507632.36	-507632.30	-507632.20	0.0073	0.0064
Mercury	-6103-06-03 06:28 J	-507544.33	-507544.23	-507544.10	0.0072	0.0053
Mercury	-6103-08-30 08:23 J	-507456.28	-507456.15	-507456.01	0.0072	0.0043
Mercury	-6103-11-26 10:04 J	-507368.23	-507368.08	-507367.92	0.0072	0.0032
Mercury	-6102-02-22 11:45 J	-507280.17	-507280.01	-507279.85	0.0072	0.0022
Mercury	-6102-05-21 13:26 J	-507192.11	-507191.94	-507191.77	0.0072	0.0012
Mercury	-6102-08-17 15:07 J	-507104.04	-507103.87	-507103.70	0.0072	0.0002
Mercury	-6102-11-13 16:33 J	-507015.98	-507015.81	-507015.64	0.0072	0.0008
Mercury	-6101-02-09 18:14 J	-506927.90	-506927.74	-506927.58	0.0072	0.0018
Mercury	-6101-05-07 19:40 J	-506839.83	-506839.68	-506839.52	0.0071	0.0028
Mercury	-6101-08-03 21:07 J	-506751.75	-506751.62	-506751.47	0.0071	0.0037
Mercury	-6101-10-30 22:33 J	-506663.67	-506663.56	-506663.42	0.0071	0.0047
Mercury	-6100-01-27 00:14 J	-506575.58	-506575.49	-506575.38	0.0071	0.0056
Mercury	-6100-04-25 01:26 J	-506487.48	-506487.44	-506487.36	0.0071	0.0066

# 6TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 6th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	-5957-09-24 12:00 J	-454104.15	-454104.00	-454103.82	0.0066	0.0043		

Venus	-5956-05-07 16:48 J	-453879.02	-453878.80	-453878.58	0.0066	0.0007
Earth	-5956-11-11 05:31 J	-453691.53	-453691.27	-453691.02	0.0066	0.0003
Moon	-5956-11-11 08:52 J	-453691.39	-453691.13	-453690.87	0.0066	0.0003 *
Venus	-5956-12-18 20:52 J	-453653.81	-453653.63	-453653.41	0.0066	0.0030
Venus	-5955-08-01 01:40 J	-453428.45	-453428.43	-453428.38	0.0066	0.0066
Mercury	-5943-11-30 23:31 J	-448923.56	-448923.52	-448923.44	0.0072	0.0065
Mercury	-5942-02-27 00:57 J	-448835.55	-448835.46	-448835.37	0.0072	0.0056
Mercury	-5942-05-26 01:40 J	-448747.53	-448747.43	-448747.31	0.0072	0.0048
Mercury	-5942-08-22 02:52 J	-448659.50	-448659.38	-448659.25	0.0072	0.0039
Mercury	-5942-11-18 03:50 J	-448571.46	-448571.34	-448571.19	0.0072	0.0031
Mercury	-5941-02-14 05:02 J	-448483.42	-448483.29	-448483.14	0.0072	0.0022
Mercury	-5941-05-12 06:14 J	-448395.38	-448395.24	-448395.09	0.0073	0.0013
Mercury	-5941-08-08 07:26 J	-448307.34	-448307.19	-448307.04	0.0073	0.0004
Mercury	-5941-11-04 08:23 J	-448219.29	-448219.15	-448219.00	0.0073	0.0006
Mercury	-5940-01-31 09:36 J	-448131.24	-448131.10	-448130.95	0.0073	0.0015
Mercury	-5940-04-29 10:33 J	-448043.19	-448043.06	-448042.91	0.0073	0.0024
Mercury	-5940-07-26 11:45 J	-447955.14	-447955.01	-447954.87	0.0073	0.0034
Mercury	-5940-10-22 12:43 J	-447867.08	-447866.97	-447866.84	0.0073	0.0043
Mercury	-5939-01-18 13:55 J	-447779.01	-447778.92	-447778.81	0.0073	0.0053
Mercury	-5939-04-16 15:21 J	-447690.94	-447690.86	-447690.78	0.0074	0.0062
Mercury	-5939-07-13 16:19 J	-447602.84	-447602.82	-447602.78	0.0074	0.0072
Venus	-5869-05-25 10:48 J	-422084.26	-422084.05	-422083.83	0.0079	0.0021
Venus	-5868-01-05 20:52 J	-421858.81	-421858.63	-421858.43	0.0078	0.0042
Mars	-5868-12-14 01:26 J	-421516.69	-421516.44	-421516.15	0.0078	0.0030
Mercury	-5858-11-04 18:00 J	-417903.77	-417903.75	-417903.70	0.0073	0.0071
Mercury	-5857-01-31 19:55 J	-417815.76	-417815.67	-417815.57	0.0072	0.0060
Mercury	-5857-04-28 21:36 J	-417727.72	-417727.60	-417727.47	0.0072	0.0049
Mercury	-5857-07-25 23:02 J	-417639.67	-417639.54	-417639.38	0.0072	0.0040
Mercury	-5857-10-22 00:43 J	-417551.61	-417551.47	-417551.30	0.0072	0.0029
Mercury	-5856-01-18 02:52 J	-417463.55	-417463.38	-417463.22	0.0072	0.0018

Mercury	-5856-04-16 04:19 J	-417375.48	-417375.32	-417375.15	0.0072	0.0008
Mercury	-5856-07-13 06:00 J	-417287.42	-417287.25	-417287.08	0.0072	0.0002
Mercury	-5856-10-09 07:40 J	-417199.35	-417199.18	-417199.01	0.0072	0.0012
Mercury	-5855-01-05 09:07 J	-417111.28	-417111.12	-417110.95	0.0072	0.0022
Mercury	-5855-04-03 10:33 J	-417023.20	-417023.06	-417022.90	0.0071	0.0032
Mercury	-5855-06-30 12:00 J	-416935.12	-416935.00	-416934.85	0.0071	0.0042
Mercury	-5855-09-26 13:55 J	-416847.04	-416846.92	-416846.80	0.0071	0.0051
Mercury	-5855-12-23 15:07 J	-416758.94	-416758.87	-416758.77	0.0071	0.0060
Mercury	-5854-03-21 17:02 J	-416670.82	-416670.79	-416670.76	0.0071	0.0069
Venus	-5711-03-12 21:21 J	-364448.63	-364448.61	-364448.56	0.0066	0.0065
Venus	-5711-10-24 01:40 J	-364223.60	-364223.43	-364223.21	0.0066	0.0030
Venus	-5710-06-06 06:43 J	-363998.44	-363998.22	-363998.00	0.0066	0.0006
Moon	-5710-11-13 13:26 J	-363838.14	-363837.94	-363837.69	0.0066	0.0034
Earth	-5710-11-13 14:52 J	-363838.07	-363837.88	-363837.63	0.0066	0.0033 *
Venus	-5709-01-17 10:48 J	-363773.19	-363773.05	-363772.86	0.0066	0.0044
Mercury	-5697-07-30 14:38 J	-359194.92	-359194.89	-359194.82	0.0072	0.0067
Mercury	-5697-10-26 16:04 J	-359106.91	-359106.83	-359106.74	0.0072	0.0058
Mercury	-5696-01-22 16:48 J	-359018.89	-359018.80	-359018.68	0.0072	0.0050
Mercury	-5696-04-20 18:00 J	-358930.86	-358930.75	-358930.62	0.0072	0.0041
Mercury	-5696-07-17 19:11 J	-358842.83	-358842.70	-358842.56	0.0072	0.0032
Mercury	-5696-10-13 20:09 J	-358754.79	-358754.66	-358754.51	0.0072	0.0024
Mercury	-5695-01-09 21:21 J	-358666.75	-358666.61	-358666.46	0.0073	0.0014
Mercury	-5695-04-07 22:33 J	-358578.71	-358578.56	-358578.41	0.0073	0.0005
Mercury	-5695-07-04 23:31 J	-358490.66	-358490.52	-358490.37	0.0073	0.0004
Mercury	-5695-10-01 00:43 J	-358402.61	-358402.47	-358402.32	0.0073	0.0013
Mercury	-5695-12-28 01:40 J	-358314.56	-358314.43	-358314.28	0.0073	0.0022
Mercury	-5694-03-26 02:52 J	-358226.51	-358226.38	-358226.24	0.0073	0.0032
Mercury	-5694-06-22 03:50 J	-358138.45	-358138.34	-358138.20	0.0073	0.0041
Mercury	-5694-09-18 05:02 J	-358050.39	-358050.29	-358050.17	0.0073	0.0051
Mercury	-5694-12-15 06:00 J	-357962.32	-357962.25	-357962.15	0.0074	0.0061

Mercury	-5693-03-12 07:26 J	-357874.23	-357874.19	-357874.14	0.0074	0.0070
Venus	-5624-11-10 17:02 J	-332428.92	-332428.79	-332428.61	0.0079	0.0056
Moon	-5623-05-17 01:11 J	-332241.70	-332241.45	-332241.18	0.0079	0.0023
Earth	-5623-05-17 03:07 J	-332241.62	-332241.37	-332241.12	0.0079	0.0025 *
Venus	-5623-06-24 03:50 J	-332203.56	-332203.34	-332203.12	0.0079	0.0007
Venus	-5622-02-04 13:26 J	-331978.02	-331977.94	-331977.81	0.0078	0.0069
Mercury	-5612-09-30 10:04 J	-328087.15	-328087.08	-328086.98	0.0073	0.0063
Mercury	-5612-12-27 11:45 J	-327999.11	-327999.01	-327998.88	0.0072	0.0052
Mercury	-5611-03-25 13:40 J	-327911.06	-327910.93	-327910.78	0.0072	0.0042
Mercury	-5611-06-21 15:21 J	-327823.01	-327822.86	-327822.70	0.0072	0.0031
Mercury	-5611-09-17 17:02 J	-327734.95	-327734.79	-327734.62	0.0072	0.0021
Mercury	-5611-12-14 18:43 J	-327646.88	-327646.72	-327646.55	0.0072	0.0011
Mercury	-5610-03-12 20:23 J	-327558.82	-327558.65	-327558.48	0.0072	0.0001
Mercury	-5610-06-08 21:50 J	-327470.75	-327470.59	-327470.41	0.0072	0.0010
Mercury	-5610-09-04 23:31 J	-327382.68	-327382.52	-327382.35	0.0072	0.0019
Mercury	-5610-12-02 00:57 J	-327294.60	-327294.46	-327294.29	0.0071	0.0029
Mercury	-5609-02-28 02:23 J	-327206.52	-327206.40	-327206.24	0.0071	0.0039
Mercury	-5609-05-26 04:04 J	-327118.44	-327118.33	-327118.20	0.0071	0.0049
Mercury	-5609-08-22 05:31 J	-327030.35	-327030.27	-327030.16	0.0071	0.0058
Mercury	-5609-11-18 07:26 J	-326942.24	-326942.19	-326942.14	0.0071	0.0067
Venus	-5465-04-10 10:04 J	-274568.18	-274568.08	-274567.94	0.0066	0.0055
Earth	-5465-11-13 10:19 J	-274351.26	-274351.07	-274350.84	0.0066	0.0038
Moon	-5465-11-13 14:09 J	-274351.11	-274350.91	-274350.69	0.0066	0.0038 *
Venus	-5465-11-21 14:52 J	-274343.08	-274342.88	-274342.67	0.0066	0.0019
Venus	-5464-07-04 19:11 J	-274117.90	-274117.70	-274117.47	0.0066	0.0017
Moon	-5464-11-14 19:40 J	-273984.70	-273984.68	-273984.60	0.0066	0.0065
Earth	-5464-11-14 22:48 J	-273984.60	-273984.55	-273984.45	0.0066	0.0063 *
Venus	-5463-02-14 23:45 J	-273892.62	-273892.51	-273892.36	0.0066	0.0054
Mars	-5462-04-09 05:16 J	-273474.59	-273474.28	-273473.94	0.0067	0.0023
Mercury	-5451-03-30 05:31 J	-269466.28	-269466.27	-269466.24	0.0072	0.0071

Mercury	-5451-06-26 06:43 J	-269378.29	-269378.22	-269378.15	0.0072	0.0062
Mercury	-5451-09-22 07:26 J	-269290.27	-269290.19	-269290.08	0.0072	0.0054
Mercury	-5451-12-19 08:38 J	-269202.24	-269202.14	-269202.02	0.0072	0.0045
Mercury	-5450-03-17 09:50 J	-269114.21	-269114.09	-269113.96	0.0072	0.0036
Mercury	-5450-06-13 10:48 J	-269026.18	-269026.05	-269025.91	0.0072	0.0028
Mercury	-5450-09-09 12:00 J	-268938.14	-268938.00	-268937.86	0.0073	0.0019
Mercury	-5450-12-06 13:11 J	-268850.10	-268849.95	-268849.81	0.0073	0.0010
Mercury	-5449-03-03 14:09 J	-268762.06	-268761.91	-268761.76	0.0073	0.0001
Mercury	-5449-05-30 15:21 J	-268674.01	-268673.86	-268673.71	0.0073	0.0008
Mercury	-5449-08-26 16:19 J	-268585.96	-268585.82	-268585.67	0.0073	0.0018
Mercury	-5449-11-22 17:16 J	-268497.90	-268497.78	-268497.63	0.0073	0.0028
Mercury	-5448-02-18 18:28 J	-268409.85	-268409.73	-268409.59	0.0073	0.0037
Mercury	-5448-05-17 19:55 J	-268321.79	-268321.67	-268321.56	0.0073	0.0046
Mercury	-5448-08-13 20:38 J	-268233.72	-268233.64	-268233.53	0.0073	0.0056
Mercury	-5448-11-09 22:04 J	-268145.64	-268145.58	-268145.51	0.0074	0.0065
Venus	-5378-12-10 08:52 J	-242548.31	-242548.13	-242547.91	0.0079	0.0034
Moon	-5377-05-18 10:33 J	-242388.29	-242388.06	-242387.80	0.0078	0.0027
Earth	-5377-05-18 13:26 J	-242388.17	-242387.94	-242387.67	0.0078	0.0025 *
Venus	-5377-07-22 19:11 J	-242322.89	-242322.70	-242322.48	0.0078	0.0030
Mercury	-5366-05-31 00:28 J	-238358.55	-238358.48	-238358.42	0.0073	0.0067
Mercury	-5366-08-27 01:40 J	-238270.52	-238270.43	-238270.31	0.0072	0.0057
Mercury	-5366-11-23 03:50 J	-238182.47	-238182.34	-238182.21	0.0072	0.0046
Mercury	-5365-02-19 05:16 J	-238094.42	-238094.28	-238094.12	0.0072	0.0035
Mercury	-5365-05-17 06:57 J	-238006.36	-238006.21	-238006.04	0.0072	0.0025
Mercury	-5365-08-13 08:38 J	-237918.30	-237918.14	-237917.97	0.0072	0.0015
Mercury	-5365-11-09 10:19 J	-237830.24	-237830.07	-237829.90	0.0072	0.0005
Mercury	-5364-02-05 12:00 J	-237742.17	-237742.00	-237741.83	0.0072	0.0006
Mercury	-5364-05-04 13:26 J	-237654.10	-237653.94	-237653.77	0.0072	0.0016
Mercury	-5364-07-31 15:07 J	-237566.02	-237565.87	-237565.71	0.0072	0.0026
Mercury	-5364-10-27 16:33 J	-237477.95	-237477.81	-237477.65	0.0071	0.0036



Mercury	-5363-01-23 18:00 J	-237389.86	-237389.75	-237389.60	0.0071	0.0046
Mercury	-5363-04-21 19:26 J	-237301.78	-237301.69	-237301.56	0.0071	0.0055
Mercury	-5363-07-18 21:07 J	-237213.67	-237213.62	-237213.54	0.0071	0.0064
Venus	-5219-05-10 00:00 J	-184687.64	-184687.50	-184687.31	0.0066	0.0042
Moon	-5219-11-15 20:24 J	-184497.91	-184497.65	-184497.38	0.0066	0.0003
Earth	-5219-11-15 20:38 J	-184497.89	-184497.64	-184497.38	0.0066	0.0002 *
Venus	-5219-12-21 05:02 J	-184462.51	-184462.29	-184462.07	0.0066	0.0006
Venus	-5218-08-03 09:50 J	-184237.29	-184237.09	-184236.90	0.0066	0.0031
Mercury	-5205-02-23 21:50 J	-179649.64	-179649.59	-179649.52	0.0072	0.0064
Mercury	-5205-05-21 22:48 J	-179561.63	-179561.55	-179561.45	0.0072	0.0056
Mercury	-5205-08-17 23:45 J	-179473.60	-179473.51	-179473.38	0.0072	0.0048
Mercury	-5205-11-14 00:57 J	-179385.57	-179385.46	-179385.33	0.0072	0.0038
Mercury	-5204-02-10 02:09 J	-179297.54	-179297.41	-179297.27	0.0072	0.0029
Mercury	-5204-05-09 03:07 J	-179209.50	-179209.37	-179209.22	0.0073	0.0021
Mercury	-5204-08-05 04:19 J	-179121.46	-179121.32	-179121.17	0.0073	0.0012
Mercury	-5204-11-01 05:31 J	-179033.42	-179033.27	-179033.13	0.0073	0.0003
Mercury	-5203-01-28 06:28 J	-178945.37	-178945.23	-178945.08	0.0073	0.0007
Mercury	-5203-04-26 07:26 J	-178857.33	-178857.19	-178857.04	0.0073	0.0016
Mercury	-5203-07-23 08:38 J	-178769.27	-178769.14	-178769.00	0.0073	0.0025
Mercury	-5203-10-19 09:50 J	-178681.22	-178681.09	-178680.96	0.0073	0.0035
Mercury	-5202-01-15 10:48 J	-178593.16	-178593.05	-178592.92	0.0073	0.0044
Mercury	-5202-04-13 12:00 J	-178505.10	-178505.00	-178504.90	0.0073	0.0054
Mercury	-5202-07-10 12:57 J	-178417.02	-178416.96	-178416.87	0.0074	0.0064
Mercury	-5202-10-06 14:09 J	-178328.92	-178328.91	-178328.88	0.0074	0.0073
Venus	-5132-05-27 16:04 J	-152892.92	-152892.83	-152892.69	0.0079	0.0068
Venus	-5131-01-08 02:52 J	-152667.60	-152667.38	-152667.16	0.0078	0.0005
Venus	-5131-08-21 12:28 J	-152442.11	-152441.98	-152441.80	0.0078	0.0057
Mars	-5130-04-01 07:26 J	-152219.46	-152219.19	-152218.90	0.0078	0.0022
Mercury	-5120-01-27 14:09 J	-148629.93	-148629.91	-148629.84	0.0073	0.0070
Mercury	-5120-04-25 16:19 J	-148541.91	-148541.82	-148541.72	0.0072	0.0059

Mercury	-5120-07-22 17:45 J	-148453.87	-148453.76	-148453.62	0.0072	0.0049
Mercury	-5120-10-18 19:40 J	-148365.82	-148365.68	-148365.53	0.0072	0.0038
Mercury	-5119-01-14 21:21 J	-148277.76	-148277.61	-148277.44	0.0072	0.0027
Mercury	-5119-04-12 23:02 J	-148189.70	-148189.54	-148189.37	0.0072	0.0017
Mercury	-5119-07-10 00:43 J	-148101.63	-148101.47	-148101.29	0.0072	0.0007
Mercury	-5119-10-06 02:24 J	-148013.57	-148013.40	-148013.23	0.0072	0.0004
Mercury	-5118-01-02 04:04 J	-147925.50	-147925.33	-147925.16	0.0072	0.0014
Mercury	-5118-03-31 05:31 J	-147837.42	-147837.27	-147837.10	0.0072	0.0024
Mercury	-5118-06-27 07:11 J	-147749.34	-147749.20	-147749.04	0.0071	0.0034
Mercury	-5118-09-23 08:38 J	-147661.26	-147661.14	-147660.99	0.0071	0.0044
Mercury	-5118-12-20 10:04 J	-147573.18	-147573.08	-147572.95	0.0071	0.0053
Mercury	-5117-03-17 11:31 J	-147485.08	-147485.02	-147484.92	0.0071	0.0063

# 5TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 5th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Jupiter	-4974-07-30 16:19 J	-95120.33	-95119.82	-95119.24	0.0066	0.0016		
Venus	-4973-06-07 12:28 J	-94807.16	-94806.98	-94806.78	0.0066	0.0033		
Moon	-4973-11-17 00:14 J	-94644.71	-94644.49	-94644.23	0.0066	0.0024		
Earth	-4973-11-17 04:04 J	-94644.57	-94644.33	-94644.10	0.0066	0.0026	*	
Venus	-4972-01-18 17:16 J	-94581.99	-94581.78	-94581.56	0.0066	0.0003		
Venus	-4972-08-31 21:50 J	-94356.75	-94356.59	-94356.40	0.0066	0.0040		

Mercury	-4960-10-23 12:14 J	-89921.01	-89920.99	-89920.94	0.0072	0.0070
Mercury	-4959-01-19 13:12 J	-89833.01	-89832.95	-89832.86	0.0072	0.0061
Mercury	-4959-04-17 14:24 J	-89744.99	-89744.90	-89744.79	0.0072	0.0053
Mercury	-4959-07-14 15:21 J	-89656.97	-89656.86	-89656.73	0.0072	0.0044
Mercury	-4959-10-10 16:19 J	-89568.93	-89568.82	-89568.68	0.0072	0.0035
Mercury	-4958-01-06 17:31 J	-89480.90	-89480.77	-89480.63	0.0072	0.0026
Mercury	-4958-04-04 18:28 J	-89392.86	-89392.73	-89392.58	0.0073	0.0018
Mercury	-4958-07-01 19:40 J	-89304.82	-89304.68	-89304.53	0.0073	0.0009
Mercury	-4958-09-27 20:52 J	-89216.78	-89216.63	-89216.48	0.0073	0.0001
Mercury	-4958-12-24 21:50 J	-89128.73	-89128.59	-89128.44	0.0073	0.0010
Mercury	-4957-03-21 23:02 J	-89040.68	-89040.54	-89040.40	0.0073	0.0019
Mercury	-4957-06-18 00:00 J	-88952.63	-88952.50	-88952.36	0.0073	0.0029
Mercury	-4957-09-14 00:57 J	-88864.57	-88864.46	-88864.32	0.0073	0.0039
Mercury	-4957-12-11 02:09 J	-88776.51	-88776.41	-88776.29	0.0073	0.0048
Mercury	-4956-03-09 03:07 J	-88688.44	-88688.37	-88688.26	0.0074	0.0058
Mercury	-4956-06-05 04:33 J	-88600.36	-88600.31	-88600.24	0.0074	0.0067
Moon	-4886-05-21 03:21 J	-63048.55	-63048.36	-63048.15	0.0079	0.0049
Earth	-4886-05-21 06:00 J	-63048.43	-63048.25	-63048.03	0.0079	0.0051 *
Venus	-4886-06-26 06:14 J	-63012.40	-63012.24	-63012.06	0.0079	0.0051
Venus	-4885-02-06 16:33 J	-62787.03	-62786.81	-62786.58	0.0078	0.0012
Venus	-4885-09-19 02:09 J	-62561.46	-62561.41	-62561.31	0.0078	0.0073
Mercury	-4875-12-24 05:16 J	-58813.34	-58813.28	-58813.20	0.0073	0.0066
Mercury	-4874-03-22 06:57 J	-58725.30	-58725.21	-58725.08	0.0072	0.0055
Mercury	-4874-06-18 08:52 J	-58637.26	-58637.13	-58636.99	0.0072	0.0045
Mercury	-4874-09-14 10:33 J	-58549.20	-58549.06	-58548.90	0.0072	0.0034
Mercury	-4874-12-11 12:28 J	-58461.14	-58460.98	-58460.82	0.0072	0.0023
Mercury	-4873-03-08 14:09 J	-58373.08	-58372.91	-58372.74	0.0072	0.0013
Mercury	-4873-06-04 15:50 J	-58285.01	-58284.84	-58284.67	0.0072	0.0003
Mercury	-4873-08-31 17:16 J	-58196.94	-58196.78	-58196.60	0.0072	0.0008
Mercury	-4873-11-27 18:57 J	-58108.87	-58108.71	-58108.54	0.0072	0.0017

Mercury	-4872-02-23 20:23 J	-58020.80	-58020.65	-58020.48	0.0071	0.0028
Mercury	-4872-05-22 22:04 J	-57932.72	-57932.58	-57932.43	0.0071	0.0037
Mercury	-4872-08-18 23:31 J	-57844.63	-57844.52	-57844.38	0.0071	0.0047
Mercury	-4872-11-15 00:57 J	-57756.54	-57756.46	-57756.34	0.0071	0.0057
Mercury	-4871-02-11 02:52 J	-57668.43	-57668.38	-57668.32	0.0071	0.0066
Moon	-4728-11-17 23:45 J	-5157.70	-5157.51	-5157.27	0.0066	0.0038
Earth	-4728-11-17 23:45 J	-5157.68	-5157.51	-5157.28	0.0066	0.0041 *
Venus	-4728-11-23 20:52 J	-5151.71	-5151.63	-5151.49	0.0066	0.0057
Venus	-4727-07-07 01:40 J	-4926.62	-4926.43	-4926.20	0.0066	0.0021
Earth	-4727-11-19 12:14 J	-4791.08	-4790.99	-4790.86	0.0066	0.0060
Moon	-4727-11-19 13:55 J	-4791.03	-4790.92	-4790.78	0.0066	0.0057 *
Venus	-4726-02-17 06:43 J	-4701.43	-4701.22	-4701.00	0.0066	0.0016
Venus	-4726-09-30 11:02 J	-4476.15	-4476.04	-4475.88	0.0067	0.0053
Mars	-4725-07-22 20:24 J	-4179.97	-4179.65	-4179.30	0.0067	0.0014
Mercury	-4714-09-19 04:04 J	-104.38	-104.33	-104.25	0.0072	0.0064
Mercury	-4714-12-16 05:16 J	-16.36	-16.28	-16.18	0.0072	0.0055
Mercury	-4713-03-13 06:28 J	71.66	71.77	71.88	0.0072	0.0047
Mercury	-4713-06-09 07:12 J	159.69	159.80	159.94	0.0072	0.0039
Mercury	-4713-09-05 08:23 J	247.73	247.85	247.99	0.0072	0.0029
Mercury	-4713-12-02 09:35 J	335.76	335.90	336.04	0.0072	0.0020
Mercury	-4712-02-28 10:33 J	423.80	423.94	424.09	0.0073	0.0012
Mercury	-4712-05-27 11:45 J	511.85	511.99	512.14	0.0073	0.0002
Mercury	-4712-08-23 12:57 J	599.89	600.04	600.18	0.0073	0.0007
Mercury	-4712-11-19 13:55 J	687.94	688.08	688.23	0.0073	0.0016
Mercury	-4711-02-15 14:52 J	775.99	776.12	776.27	0.0073	0.0026
Mercury	-4711-05-14 16:04 J	864.05	864.17	864.31	0.0073	0.0035
Mercury	-4711-08-10 17:16 J	952.11	952.22	952.34	0.0073	0.0044
Mercury	-4711-11-06 18:00 J	1040.17	1040.25	1040.37	0.0073	0.0055
Mercury	-4710-02-02 19:26 J	1128.25	1128.31	1128.39	0.0074	0.0064
Mercury	-4710-05-01 20:38 J	1216.36	1216.36	1216.37	0.0074	0.0073

Earth	-4640-05-22 17:31 J	26804.97	26805.23	26805.50	0.0079	0.0003
Moon	-4640-05-22 20:23 J	26805.09	26805.35	26805.60	0.0079	0.0005 *
Venus	-4640-07-24 22:04 J	26868.23	26868.42	26868.65	0.0079	0.0028
Venus	-4639-03-07 08:38 J	27093.66	27093.86	27094.06	0.0078	0.0035
Mercury	-4629-08-22 19:26 J	30915.27	30915.31	30915.36	0.0073	0.0070
Mercury	-4629-11-18 20:52 J	31003.29	31003.37	31003.49	0.0073	0.0060
Mercury	-4628-02-14 22:48 J	31091.33	31091.45	31091.59	0.0072	0.0049
Mercury	-4628-05-14 00:43 J	31179.38	31179.53	31179.68	0.0072	0.0038
Mercury	-4628-08-10 02:09 J	31267.44	31267.59	31267.76	0.0072	0.0028
Mercury	-4628-11-06 03:50 J	31355.50	31355.66	31355.84	0.0072	0.0017
Mercury	-4627-02-02 05:45 J	31443.57	31443.74	31443.91	0.0072	0.0006
Mercury	-4627-05-01 07:26 J	31531.64	31531.81	31531.98	0.0072	0.0004
Mercury	-4627-07-28 09:07 J	31619.71	31619.88	31620.05	0.0072	0.0014
Mercury	-4627-10-24 10:33 J	31707.78	31707.94	31708.11	0.0072	0.0024
Mercury	-4626-01-20 12:14 J	31795.86	31796.01	31796.16	0.0071	0.0034
Mercury	-4626-04-18 13:55 J	31883.95	31884.08	31884.21	0.0071	0.0044
Mercury	-4626-07-15 15:21 J	31972.03	31972.14	31972.26	0.0071	0.0054
Mercury	-4626-10-11 16:48 J	32060.14	32060.20	32060.29	0.0071	0.0063
Moon	-4482-11-20 04:04 J	84695.42	84695.67	84695.92	0.0066	0.0010
Earth	-4482-11-20 07:26 J	84695.57	84695.81	84696.07	0.0066	0.0014 *
Venus	-4482-12-23 09:35 J	84728.77	84728.90	84729.07	0.0066	0.0048
Venus	-4481-08-04 14:24 J	84953.89	84954.10	84954.32	0.0066	0.0012
Venus	-4480-03-17 19:12 J	85179.10	85179.30	85179.51	0.0066	0.0025
Venus	-4480-10-28 23:31 J	85404.42	85404.48	85404.58	0.0067	0.0062
Mercury	-4468-05-18 18:43 J	89624.26	89624.28	89624.34	0.0072	0.0069
Mercury	-4468-08-14 19:55 J	89712.26	89712.33	89712.42	0.0072	0.0060
Mercury	-4468-11-10 21:07 J	89800.28	89800.38	89800.48	0.0072	0.0052
Mercury	-4467-02-06 21:50 J	89888.31	89888.41	89888.54	0.0072	0.0043
Mercury	-4467-05-05 23:02 J	89976.34	89976.46	89976.59	0.0072	0.0034
Mercury	-4467-08-02 00:00 J	90064.37	90064.50	90064.64	0.0072	0.0025

Mercury	-4467-10-29 01:12 J	90152.41	90152.55	90152.69	0.0072	0.0016
Mercury	-4466-01-25 02:09 J	90240.45	90240.59	90240.74	0.0073	0.0008
Mercury	-4466-04-23 03:21 J	90328.49	90328.64	90328.79	0.0073	0.0002
Mercury	-4466-07-20 04:19 J	90416.54	90416.68	90416.83	0.0073	0.0011
Mercury	-4466-10-16 05:31 J	90504.59	90504.73	90504.87	0.0073	0.0020
Mercury	-4465-01-12 06:14 J	90592.64	90592.76	90592.91	0.0073	0.0030
Mercury	-4465-04-09 07:26 J	90680.70	90680.81	90680.94	0.0073	0.0039
Mercury	-4465-07-06 08:38 J	90768.76	90768.86	90768.98	0.0073	0.0049
Mercury	-4465-10-02 09:35 J	90856.83	90856.90	90857.00	0.0073	0.0058
Mercury	-4465-12-29 10:47 J	90944.91	90944.95	90945.02	0.0074	0.0068
Venus	-4394-01-10 01:55 J	116523.53	116523.58	116523.67	0.0079	0.0075
Earth	-4394-05-25 01:12 J	116658.35	116658.55	116658.79	0.0079	0.0042
Moon	-4394-05-25 03:21 J	116658.44	116658.64	116658.88	0.0079	0.0045 *
Venus	-4394-08-23 12:43 J	116748.81	116749.03	116749.25	0.0078	0.0012
Venus	-4393-04-04 22:19 J	116974.28	116974.43	116974.62	0.0078	0.0050
Mars	-4393-07-16 22:47 J	117077.30	117077.45	117077.67	0.0078	0.0060
Mercury	-4383-07-19 10:19 J	120731.87	120731.93	120732.00	0.0073	0.0067
Mercury	-4383-10-15 12:14 J	120819.90	120820.01	120820.12	0.0072	0.0056
Mercury	-4382-01-11 13:40 J	120907.95	120908.07	120908.22	0.0072	0.0045
Mercury	-4382-04-09 15:35 J	120996.00	120996.15	120996.30	0.0072	0.0035
Mercury	-4382-07-06 17:16 J	121084.06	121084.22	121084.39	0.0072	0.0024
Mercury	-4382-10-02 18:57 J	121172.12	121172.29	121172.46	0.0072	0.0014
Mercury	-4382-12-29 20:38 J	121260.19	121260.36	121260.53	0.0072	0.0003
Mercury	-4381-03-26 22:19 J	121348.26	121348.43	121348.60	0.0072	0.0007
Mercury	-4381-06-22 23:45 J	121436.33	121436.49	121436.67	0.0072	0.0018
Mercury	-4381-09-19 01:26 J	121524.41	121524.56	121524.72	0.0072	0.0028
Mercury	-4381-12-16 02:52 J	121612.49	121612.62	121612.78	0.0071	0.0038
Mercury	-4380-03-14 04:33 J	121700.57	121700.69	121700.83	0.0071	0.0047
Mercury	-4380-06-10 06:00 J	121788.67	121788.75	121788.87	0.0071	0.0057
Mercury	-4380-09-06 07:26 J	121876.78	121876.81	121876.89	0.0071	0.0067

Earth	-4236-11-21 16:48 J	174548.96	174549.20	174549.45	0.0066	0.0019
Moon	-4236-11-21 17:31 J	174549.02	174549.23	174549.48	0.0066	0.0023 *
Venus	-4235-01-20 23:31 J	174609.30	174609.48	174609.67	0.0066	0.0036
Venus	-4235-09-03 04:19 J	174834.47	174834.68	174834.90	0.0066	0.0001
Venus	-4234-04-16 08:52 J	175059.70	175059.87	175060.06	0.0067	0.0037
Mercury	-4222-01-16 09:50 J	179352.91	179352.91	179352.94	0.0072	0.0072
Mercury	-4222-04-14 10:48 J	179440.90	179440.95	179441.03	0.0072	0.0063
Mercury	-4222-07-11 12:00 J	179528.91	179529.00	179529.10	0.0072	0.0054
Mercury	-4222-10-07 13:11 J	179616.94	179617.05	179617.16	0.0072	0.0046
Mercury	-4221-01-03 13:55 J	179704.97	179705.08	179705.22	0.0072	0.0037
Mercury	-4221-03-31 14:52 J	179793.00	179793.12	179793.27	0.0072	0.0029
Mercury	-4221-06-27 16:04 J	179881.04	179881.17	179881.32	0.0072	0.0019
Mercury	-4221-09-23 17:16 J	179969.08	179969.22	179969.37	0.0073	0.0010
Mercury	-4221-12-20 18:14 J	180057.12	180057.26	180057.41	0.0073	0.0002
Mercury	-4220-03-18 19:26 J	180145.16	180145.31	180145.46	0.0073	0.0008
Mercury	-4220-06-14 20:24 J	180233.21	180233.35	180233.50	0.0073	0.0018
Mercury	-4220-09-10 21:21 J	180321.26	180321.39	180321.54	0.0073	0.0027
Mercury	-4220-12-07 22:33 J	180409.32	180409.44	180409.57	0.0073	0.0036
Mercury	-4219-03-05 23:45 J	180497.38	180497.49	180497.61	0.0073	0.0046
Mercury	-4219-06-02 00:43 J	180585.44	180585.53	180585.63	0.0073	0.0056
Mercury	-4219-08-29 01:55 J	180673.52	180673.58	180673.65	0.0074	0.0065
Jupiter	-4149-03-31 19:11 J	206090.82	206091.30	206091.87	0.0079	0.0022
Venus	-4148-02-07 18:57 J	206404.12	206404.29	206404.47	0.0079	0.0049
Venus	-4148-09-21 05:02 J	206629.50	206629.71	206629.93	0.0078	0.0013
Venus	-4147-05-04 14:52 J	206855.06	206855.12	206855.20	0.0078	0.0074
Mars	-4147-12-09 12:28 J	207073.98	207074.02	207074.11	0.0078	0.0076
Mercury	-4137-03-18 00:00 J	210460.48	210460.50	210460.56	0.0073	0.0071
Mercury	-4137-06-14 01:55 J	210548.50	210548.58	210548.69	0.0072	0.0060
Mercury	-4137-09-10 03:35 J	210636.54	210636.65	210636.79	0.0072	0.0049
Mercury	-4137-12-07 05:31 J	210724.59	210724.73	210724.88	0.0072	0.0038

Mercury	-4136-03-05 07:26 J	210812.65	210812.81	210812.97	0.0072	0.0028
Mercury	-4136-06-01 09:07 J	210900.71	210900.88	210901.05	0.0072	0.0017
Mercury	-4136-08-28 10:48 J	210988.78	210988.95	210989.12	0.0072	0.0007
Mercury	-4136-11-24 12:28 J	211076.85	211077.02	211077.19	0.0072	0.0004
Mercury	-4135-02-20 14:09 J	211164.92	211165.09	211165.26	0.0072	0.0014
Mercury	-4135-05-19 15:35 J	211253.00	211253.15	211253.32	0.0072	0.0024
Mercury	-4135-08-15 17:02 J	211341.08	211341.21	211341.38	0.0071	0.0035
Mercury	-4135-11-11 18:43 J	211429.16	211429.28	211429.43	0.0071	0.0044
Mercury	-4134-02-07 20:09 J	211517.25	211517.34	211517.47	0.0071	0.0055
Mercury	-4134-05-06 21:50 J	211605.35	211605.41	211605.50	0.0071	0.0064

# 4TH MILLENNIUM BCE

This is a list of transits visible from Pluto in the 4th millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	-3991-11-22 07:26 J		264035.71	264035.81	264035.95	0.0066	0.0058	
Earth	-3991-11-22 10:33 J		264035.83	264035.94	264036.11	0.0066	0.0055	*
Venus	-3990-07-09 06:14 J		264264.75	264264.76	264264.83	0.0066	0.0065	
Earth	-3990-11-23 22:48 J		264402.29	264402.45	264402.67	0.0066	0.0045	
Moon	-3990-11-24 02:23 J		264402.45	264402.60	264402.80	0.0066	0.0048	*
Venus	-3989-02-19 11:02 J		264489.78	264489.96	264490.18	0.0066	0.0029	
Venus	-3989-10-01 16:19 J		264714.96	264715.18	264715.40	0.0066	0.0008	
Venus	-3988-05-14 20:52 J		264940.22	264940.37	264940.54	0.0067	0.0045	



Mars	-3988-11-05 04:33 J	265114.35	265114.69	265115.03	0.0067	0.0011
Mercury	-3977-12-12 01:11 J	269169.53	269169.55	269169.61	0.0072	0.0069
Mercury	-3976-03-10 02:23 J	269257.53	269257.60	269257.69	0.0072	0.0060
Mercury	-3976-06-06 03:21 J	269345.55	269345.64	269345.75	0.0072	0.0052
Mercury	-3976-09-02 04:19 J	269433.58	269433.68	269433.81	0.0072	0.0043
Mercury	-3976-11-29 05:31 J	269521.61	269521.73	269521.86	0.0072	0.0034
Mercury	-3975-02-25 06:28 J	269609.64	269609.77	269609.92	0.0072	0.0026
Mercury	-3975-05-24 07:40 J	269697.68	269697.82	269697.96	0.0072	0.0016
Mercury	-3975-08-20 08:38 J	269785.72	269785.86	269786.01	0.0073	0.0008
Mercury	-3975-11-16 09:50 J	269873.76	269873.91	269874.06	0.0073	0.0002
Mercury	-3974-02-12 10:48 J	269961.81	269961.95	269962.10	0.0073	0.0011
Mercury	-3974-05-11 12:00 J	270049.86	270050.00	270050.14	0.0073	0.0020
Mercury	-3974-08-07 12:43 J	270137.91	270138.03	270138.18	0.0073	0.0031
Mercury	-3974-11-03 13:55 J	270225.97	270226.08	270226.21	0.0073	0.0040
Mercury	-3973-01-30 15:21 J	270314.03	270314.14	270314.24	0.0073	0.0049
Mercury	-3973-04-27 16:04 J	270402.09	270402.17	270402.27	0.0073	0.0059
Mercury	-3973-07-24 17:02 J	270490.18	270490.21	270490.28	0.0074	0.0069
Earth	-3903-05-26 16:04 J	295997.97	295998.17	295998.40	0.0079	0.0043
Moon	-3903-05-26 18:28 J	295998.08	295998.27	295998.51	0.0079	0.0047 *
Venus	-3902-03-09 08:09 J	296284.66	296284.84	296285.06	0.0078	0.0035
Venus	-3902-10-20 18:14 J	296510.07	296510.26	296510.49	0.0078	0.0028
Mercury	-3891-02-11 14:52 J	300277.08	300277.12	300277.20	0.0073	0.0068
Mercury	-3891-05-10 16:48 J	300365.10	300365.20	300365.31	0.0072	0.0057
Mercury	-3891-08-06 18:43 J	300453.15	300453.28	300453.41	0.0072	0.0046
Mercury	-3891-11-02 20:09 J	300541.20	300541.34	300541.50	0.0072	0.0036
Mercury	-3890-01-29 22:04 J	300629.26	300629.42	300629.59	0.0072	0.0025
Mercury	-3890-04-27 23:45 J	300717.33	300717.49	300717.66	0.0072	0.0014
Mercury	-3890-07-25 01:26 J	300805.39	300805.56	300805.74	0.0072	0.0004
Mercury	-3890-10-21 03:07 J	300893.46	300893.63	300893.81	0.0072	0.0007
Mercury	-3889-01-17 04:48 J	300981.54	300981.70	300981.87	0.0072	0.0017

Mercury	-3889-04-14 06:14 J	301069.62	301069.76	301069.93	0.0072	0.0028
Mercury	-3889-07-11 07:55 J	301157.70	301157.83	301157.99	0.0071	0.0038
Mercury	-3889-10-07 09:36 J	301245.78	301245.90	301246.04	0.0071	0.0047
Mercury	-3888-01-03 11:02 J	301333.88	301333.96	301334.08	0.0071	0.0057
Mercury	-3888-04-01 12:28 J	301421.99	301422.02	301422.10	0.0071	0.0067
Earth	-3745-11-23 18:28 J	353889.04	353889.27	353889.50	0.0066	0.0028
Moon	-3745-11-23 18:14 J	353889.06	353889.26	353889.49	0.0066	0.0031 *
Venus	-3744-08-06 18:57 J	354145.19	354145.29	354145.41	0.0066	0.0056
Venus	-3743-03-19 23:31 J	354370.29	354370.48	354370.70	0.0066	0.0021
Venus	-3743-10-31 04:33 J	354595.48	354595.69	354595.91	0.0066	0.0017
Venus	-3742-06-13 08:52 J	354820.77	354820.87	354821.02	0.0067	0.0054
Mercury	-3731-11-07 17:02 J	358986.16	358986.21	358986.28	0.0072	0.0065
Mercury	-3730-02-03 18:14 J	359074.17	359074.26	359074.35	0.0072	0.0056
Mercury	-3730-05-02 18:57 J	359162.19	359162.29	359162.41	0.0072	0.0048
Mercury	-3730-07-29 19:55 J	359250.22	359250.33	359250.46	0.0072	0.0039
Mercury	-3730-10-25 21:07 J	359338.25	359338.38	359338.52	0.0072	0.0030
Mercury	-3729-01-21 22:04 J	359426.29	359426.42	359426.57	0.0072	0.0022
Mercury	-3729-04-18 23:16 J	359514.33	359514.47	359514.61	0.0073	0.0012
Mercury	-3729-07-16 00:14 J	359602.37	359602.51	359602.66	0.0073	0.0004
Mercury	-3729-10-12 01:26 J	359690.41	359690.56	359690.70	0.0073	0.0006
Mercury	-3728-01-08 02:23 J	359778.46	359778.60	359778.75	0.0073	0.0015
Mercury	-3728-04-06 03:21 J	359866.51	359866.64	359866.79	0.0073	0.0025
Mercury	-3728-07-03 04:19 J	359954.56	359954.68	359954.82	0.0073	0.0035
Mercury	-3728-09-29 05:31 J	360042.62	360042.73	360042.86	0.0073	0.0044
Mercury	-3728-12-26 06:28 J	360130.69	360130.77	360130.89	0.0073	0.0054
Mercury	-3727-03-24 07:55 J	360218.76	360218.83	360218.91	0.0074	0.0063
Mercury	-3727-06-20 08:52 J	360306.86	360306.87	360306.90	0.0074	0.0073
Moon	-3657-05-27 23:16 J	385851.21	385851.47	385851.74	0.0079	0.0002
Earth	-3657-05-28 02:23 J	385851.34	385851.60	385851.86	0.0079	0.0004 *
Venus	-3657-08-24 13:11 J	385940.02	385940.05	385940.11	0.0079	0.0077

Venus	-3656-04-06 23:45 J	386165.27	386165.49	386165.71	0.0078	0.0014
Venus	-3656-11-18 09:21 J	386390.73	386390.89	386391.08	0.0078	0.0047
Mercury	-3645-01-08 06:14 J	390093.69	390093.76	390093.86	0.0073	0.0063
Mercury	-3645-04-05 08:09 J	390181.73	390181.84	390181.97	0.0072	0.0052
Mercury	-3645-07-02 10:04 J	390269.78	390269.92	390270.06	0.0072	0.0041
Mercury	-3645-09-28 11:31 J	390357.83	390357.98	390358.15	0.0072	0.0030
Mercury	-3645-12-25 13:26 J	390445.89	390446.06	390446.23	0.0072	0.0019
Mercury	-3644-03-23 15:07 J	390533.96	390534.13	390534.30	0.0072	0.0009
Mercury	-3644-06-19 16:48 J	390622.03	390622.20	390622.37	0.0072	0.0002
Mercury	-3644-09-15 18:28 J	390710.10	390710.27	390710.44	0.0072	0.0012
Mercury	-3644-12-12 19:55 J	390798.18	390798.33	390798.50	0.0072	0.0022
Mercury	-3643-03-10 21:36 J	390886.25	390886.40	390886.56	0.0071	0.0032
Mercury	-3643-06-06 23:02 J	390974.34	390974.46	390974.61	0.0071	0.0043
Mercury	-3643-09-03 00:43 J	391062.43	391062.53	391062.66	0.0071	0.0053
Mercury	-3643-11-30 02:09 J	391150.53	391150.59	391150.69	0.0071	0.0063
Earth	-3499-11-25 23:31 J	443742.23	443742.48	443742.74	0.0066	0.0009
Moon	-3499-11-26 02:38 J	443742.37	443742.61	443742.87	0.0066	0.0011 *
Venus	-3498-09-05 05:31 J	444025.63	444025.73	444025.89	0.0066	0.0053
Venus	-3497-04-17 10:48 J	444250.74	444250.95	444251.17	0.0066	0.0016
Venus	-3497-11-28 15:21 J	444475.94	444476.14	444476.36	0.0067	0.0021
Venus	-3496-07-11 20:09 J	444701.24	444701.34	444701.46	0.0067	0.0058
Mercury	-3485-10-03 07:40 J	448802.78	448802.82	448802.90	0.0072	0.0065
Mercury	-3485-12-30 08:52 J	448890.79	448890.87	448890.97	0.0072	0.0056
Mercury	-3484-03-28 10:04 J	448978.82	448978.92	448979.03	0.0072	0.0047
Mercury	-3484-06-24 11:02 J	449066.84	449066.96	449067.09	0.0072	0.0038
Mercury	-3484-09-20 12:00 J	449154.88	449155.00	449155.14	0.0072	0.0030
Mercury	-3484-12-17 13:11 J	449242.91	449243.05	449243.19	0.0072	0.0021
Mercury	-3483-03-15 14:09 J	449330.95	449331.09	449331.24	0.0073	0.0012
Mercury	-3483-06-11 15:21 J	449418.99	449419.14	449419.28	0.0073	0.0003
Mercury	-3483-09-07 16:19 J	449507.04	449507.18	449507.33	0.0073	0.0007

Mercury	-3483-12-04 17:16 J	449595.08	449595.22	449595.37	0.0073	0.0016
Mercury	-3482-03-02 18:28 J	449683.13	449683.27	449683.41	0.0073	0.0025
Mercury	-3482-05-29 19:11 J	449771.19	449771.30	449771.44	0.0073	0.0035
Mercury	-3482-08-25 20:23 J	449859.24	449859.35	449859.48	0.0073	0.0044
Mercury	-3482-11-21 21:36 J	449947.31	449947.40	449947.50	0.0073	0.0054
Mercury	-3481-02-17 22:33 J	450035.38	450035.44	450035.52	0.0074	0.0064
Mercury	-3481-05-15 23:45 J	450123.49	450123.49	450123.51	0.0074	0.0073
Moon	-3411-05-30 04:48 J	475704.48	475704.70	475704.96	0.0079	0.0026
Earth	-3411-05-30 06:00 J	475704.52	475704.75	475705.01	0.0079	0.0029 *
Venus	-3411-09-23 01:26 J	475820.46	475820.56	475820.66	0.0079	0.0069
Venus	-3410-05-06 11:16 J	476045.76	476045.97	476046.20	0.0078	0.0007
Venus	-3410-12-17 21:21 J	476271.23	476271.39	476271.55	0.0078	0.0054
Mars	-3409-03-25 18:43 J	476370.00	476370.28	476370.57	0.0078	0.0012
Mercury	-3400-12-03 20:38 J	479910.27	479910.36	479910.44	0.0073	0.0063
Mercury	-3399-03-01 21:50 J	479998.31	479998.41	479998.55	0.0072	0.0053
Mercury	-3399-05-28 23:45 J	480086.36	480086.49	480086.65	0.0072	0.0042
Mercury	-3399-08-25 01:40 J	480174.42	480174.57	480174.74	0.0072	0.0030
Mercury	-3399-11-21 03:21 J	480262.48	480262.64	480262.82	0.0072	0.0020
Mercury	-3398-02-17 05:16 J	480350.55	480350.72	480350.89	0.0072	0.0009
Mercury	-3398-05-16 06:57 J	480438.62	480438.79	480438.97	0.0072	0.0002
Mercury	-3398-08-12 08:38 J	480526.69	480526.86	480527.03	0.0072	0.0012
Mercury	-3398-11-08 10:04 J	480614.77	480614.92	480615.10	0.0072	0.0023
Mercury	-3397-02-04 11:45 J	480702.85	480702.99	480703.15	0.0071	0.0033
Mercury	-3397-05-02 13:26 J	480790.93	480791.06	480791.21	0.0071	0.0043
Mercury	-3397-07-29 15:07 J	480879.02	480879.13	480879.25	0.0071	0.0053
Mercury	-3397-10-25 16:48 J	480967.12	480967.20	480967.28	0.0071	0.0063
Moon	-3253-11-27 02:38 J	533595.36	533595.61	533595.88	0.0066	0.0010
Earth	-3253-11-27 04:33 J	533595.45	533595.69	533595.95	0.0066	0.0011 *
Venus	-3252-10-03 16:47 J	533906.07	533906.20	533906.37	0.0066	0.0049
Venus	-3251-05-16 21:50 J	534131.20	534131.41	534131.63	0.0066	0.0012

Venus	-3251-12-28 02:23 J	534356.41	534356.60	534356.82	0.0067	0.0026
Mars	-3250-02-17 21:50 J	534408.41	534408.41	534408.45	0.0067	0.0067
Venus	-3250-08-10 07:12 J	534581.74	534581.80	534581.89	0.0067	0.0063
Mercury	-3239-08-29 23:31 J	538619.41	538619.48	538619.54	0.0072	0.0063
Mercury	-3239-11-26 00:00 J	538707.42	538707.50	538707.61	0.0072	0.0055
Mercury	-3238-02-22 01:12 J	538795.45	538795.55	538795.67	0.0072	0.0046
Mercury	-3238-05-21 02:09 J	538883.48	538883.59	538883.72	0.0072	0.0037
Mercury	-3238-08-17 03:07 J	538971.51	538971.63	538971.77	0.0072	0.0029
Mercury	-3238-11-13 04:19 J	539059.54	539059.68	539059.82	0.0072	0.0019
Mercury	-3237-02-09 05:16 J	539147.58	539147.72	539147.87	0.0073	0.0011
Mercury	-3237-05-07 06:28 J	539235.62	539235.77	539235.91	0.0073	0.0001
Mercury	-3237-08-03 07:26 J	539323.67	539323.81	539323.96	0.0073	0.0008
Mercury	-3237-10-30 08:23 J	539411.71	539411.85	539412.00	0.0073	0.0018
Mercury	-3236-01-26 09:21 J	539499.76	539499.89	539500.04	0.0073	0.0027
Mercury	-3236-04-24 10:33 J	539587.82	539587.94	539588.07	0.0073	0.0036
Mercury	-3236-07-21 11:45 J	539675.88	539675.99	539676.10	0.0073	0.0046
Mercury	-3236-10-17 12:28 J	539763.94	539764.02	539764.13	0.0073	0.0056
Mercury	-3235-01-13 13:55 J	539852.02	539852.08	539852.15	0.0074	0.0065
Earth	-3165-05-31 11:45 J	565557.85	565557.99	565558.18	0.0079	0.0062
Moon	-3165-05-31 15:07 J	565557.99	565558.13	565558.33	0.0079	0.0060 *
Venus	-3165-10-21 14:09 J	565700.95	565701.09	565701.26	0.0078	0.0057
Venus	-3164-06-04 00:28 J	565926.30	565926.52	565926.74	0.0078	0.0006
Venus	-3163-01-15 09:36 J	566151.82	566151.90	566152.05	0.0078	0.0067
Mercury	-3154-08-03 09:21 J	569638.87	569638.89	569638.90	0.0073	0.0072
Mercury	-3154-10-30 11:02 J	569726.87	569726.96	569727.05	0.0073	0.0061
Mercury	-3153-01-26 12:28 J	569814.91	569815.02	569815.16	0.0072	0.0050
Mercury	-3153-04-23 14:23 J	569902.96	569903.10	569903.25	0.0072	0.0039
Mercury	-3153-07-20 16:19 J	569991.02	569991.18	569991.34	0.0072	0.0028
Mercury	-3153-10-16 17:45 J	570079.09	570079.24	570079.42	0.0072	0.0018
Mercury	-3152-01-12 19:40 J	570167.15	570167.32	570167.50	0.0072	0.0007

Mercury	-3152-04-10 21:36 J	570255.22	570255.40	570255.57	0.0072	0.0004
Mercury	-3152-07-07 23:02 J	570343.30	570343.46	570343.64	0.0072	0.0014
Mercury	-3152-10-04 00:43 J	570431.37	570431.53	570431.70	0.0072	0.0024
Mercury	-3152-12-31 02:23 J	570519.45	570519.60	570519.76	0.0071	0.0035
Mercury	-3151-03-29 04:04 J	570607.54	570607.67	570607.81	0.0071	0.0045
Mercury	-3151-06-25 05:45 J	570695.63	570695.74	570695.85	0.0071	0.0055
Mercury	-3151-09-21 07:26 J	570783.74	570783.81	570783.88	0.0071	0.0065
Moon	-3007-11-29 05:16 J	623448.49	623448.72	623448.95	0.0066	0.0024
Earth	-3007-11-29 07:26 J	623448.58	623448.81	623449.06	0.0066	0.0024 *
Venus	-3006-11-02 02:38 J	623786.47	623786.61	623786.77	0.0066	0.0048
Venus	-3005-06-14 07:26 J	624011.60	624011.81	624012.04	0.0066	0.0011
Venus	-3004-01-25 12:00 J	624236.82	624237.00	624237.22	0.0067	0.0027
Mars	-3004-07-11 03:50 J	624403.32	624403.66	624404.01	0.0067	0.0003
Venus	-3004-09-07 16:47 J	624462.17	624462.20	624462.29	0.0067	0.0064

# 3RD MILLENNIUM BCE

This is a list of transits visible from Pluto in the 3rd millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	-2993-07-25 13:40 J		628436.02	628436.07	628436.14	0.0072	0.0065	
Mercury	-2993-10-21 14:38 J		628524.03	628524.11	628524.21	0.0072	0.0056	
Mercury	-2992-01-17 15:50 J		628612.06	628612.16	628612.27	0.0072	0.0047	
Mercury	-2992-04-15 16:47 J		628700.08	628700.20	628700.33	0.0072	0.0039	

Mercury	-2992-07-12 18:00 J	628788.12	628788.25	628788.38	0.0072	0.0030
Mercury	-2992-10-08 18:57 J	628876.15	628876.29	628876.43	0.0072	0.0021
Mercury	-2991-01-04 19:55 J	628964.19	628964.33	628964.48	0.0072	0.0012
Mercury	-2991-04-02 20:52 J	629052.23	629052.37	629052.52	0.0073	0.0004
Mercury	-2991-06-29 22:04 J	629140.27	629140.42	629140.56	0.0073	0.0007
Mercury	-2991-09-25 23:02 J	629228.32	629228.46	629228.60	0.0073	0.0016
Mercury	-2991-12-23 00:00 J	629316.37	629316.50	629316.64	0.0073	0.0025
Mercury	-2990-03-21 00:57 J	629404.42	629404.54	629404.68	0.0073	0.0035
Mercury	-2990-06-17 02:09 J	629492.48	629492.59	629492.71	0.0073	0.0044
Mercury	-2990-09-13 03:21 J	629580.54	629580.64	629580.74	0.0073	0.0054
Mercury	-2990-12-10 04:19 J	629668.62	629668.68	629668.76	0.0073	0.0064
Mercury	-2989-03-07 05:16 J	629756.72	629756.72	629756.74	0.0074	0.0074
Moon	-2919-06-02 12:57 J	655410.95	655411.04	655411.13	0.0079	0.0074
Earth	-2919-06-02 12:43 J	655410.99	655411.03	655411.14	0.0079	0.0076 *
Venus	-2919-11-20 00:14 J	655581.36	655581.51	655581.67	0.0078	0.0055
Venus	-2918-07-03 10:19 J	655806.71	655806.93	655807.15	0.0078	0.0007
Venus	-2917-02-13 19:40 J	656032.23	656032.32	656032.45	0.0078	0.0068
Mercury	-2908-09-24 23:45 J	659543.44	659543.49	659543.59	0.0073	0.0065
Mercury	-2908-12-22 01:40 J	659631.47	659631.57	659631.71	0.0072	0.0054
Mercury	-2907-03-20 03:36 J	659719.52	659719.65	659719.80	0.0072	0.0042
Mercury	-2907-06-16 05:31 J	659807.58	659807.73	659807.89	0.0072	0.0031
Mercury	-2907-09-12 07:26 J	659895.64	659895.81	659895.97	0.0072	0.0020
Mercury	-2907-12-09 09:07 J	659983.71	659983.88	659984.05	0.0072	0.0010
Mercury	-2906-03-07 10:47 J	660071.78	660071.95	660072.12	0.0072	0.0001
Mercury	-2906-06-03 12:28 J	660159.85	660160.02	660160.19	0.0072	0.0011
Mercury	-2906-08-30 14:09 J	660247.93	660248.09	660248.26	0.0072	0.0022
Mercury	-2906-11-26 15:50 J	660336.01	660336.16	660336.32	0.0071	0.0032
Mercury	-2905-02-22 17:16 J	660424.09	660424.22	660424.37	0.0071	0.0042
Mercury	-2905-05-20 18:57 J	660512.18	660512.29	660512.42	0.0071	0.0052
Mercury	-2905-08-16 20:23 J	660600.29	660600.35	660600.45	0.0071	0.0063

Moon	-2762-11-29 21:21 J	712935.32	712935.39	712935.50	0.0065	0.0062
Earth	-2762-11-29 22:19 J	712935.37	712935.43	712935.54	0.0065	0.0062 *
Earth	-2761-11-30 10:19 J	713301.74	713301.93	713302.16	0.0066	0.0037
Moon	-2761-11-30 13:12 J	713301.87	713302.05	713302.28	0.0066	0.0039 *
Venus	-2760-11-30 12:00 J	713666.87	713667.00	713667.18	0.0066	0.0048
Venus	-2759-07-13 17:02 J	713892.01	713892.21	713892.44	0.0066	0.0011
Venus	-2758-02-23 22:04 J	714117.22	714117.42	714117.62	0.0067	0.0027
Venus	-2758-10-07 02:38 J	714342.58	714342.61	714342.68	0.0067	0.0065
Mercury	-2747-06-21 04:19 J	718252.64	718252.68	718252.75	0.0072	0.0066
Mercury	-2747-09-17 05:16 J	718340.65	718340.72	718340.82	0.0072	0.0057
Mercury	-2747-12-14 06:28 J	718428.67	718428.77	718428.88	0.0072	0.0048
Mercury	-2746-03-12 07:12 J	718516.69	718516.80	718516.93	0.0072	0.0040
Mercury	-2746-06-08 08:09 J	718604.72	718604.84	718604.99	0.0072	0.0032
Mercury	-2746-09-04 09:21 J	718692.76	718692.89	718693.03	0.0072	0.0022
Mercury	-2746-12-01 10:33 J	718780.80	718780.94	718781.08	0.0072	0.0013
Mercury	-2745-02-27 11:31 J	718868.84	718868.98	718869.13	0.0073	0.0004
Mercury	-2745-05-25 12:28 J	718956.88	718957.02	718957.17	0.0073	0.0006
Mercury	-2745-08-21 13:26 J	719044.93	719045.06	719045.21	0.0073	0.0015
Mercury	-2745-11-17 14:38 J	719132.97	719133.11	719133.25	0.0073	0.0024
Mercury	-2744-02-13 15:36 J	719221.03	719221.15	719221.29	0.0073	0.0034
Mercury	-2744-05-12 16:33 J	719309.08	719309.19	719309.32	0.0073	0.0043
Mercury	-2744-08-08 17:45 J	719397.15	719397.24	719397.35	0.0073	0.0053
Mercury	-2744-11-04 18:43 J	719485.22	719485.28	719485.37	0.0073	0.0062
Mercury	-2743-01-31 19:55 J	719573.31	719573.33	719573.36	0.0074	0.0072
Venus	-2673-12-18 11:02 J	745461.81	745461.96	745462.15	0.0078	0.0049
Venus	-2672-07-31 21:07 J	745687.17	745687.38	745687.61	0.0078	0.0013
Venus	-2671-03-14 06:43 J	745912.73	745912.78	745912.88	0.0078	0.0074
Mercury	-2662-08-21 13:55 J	749360.02	749360.08	749360.17	0.0073	0.0066
Mercury	-2662-11-17 15:36 J	749448.06	749448.15	749448.28	0.0072	0.0055
Mercury	-2661-02-13 17:31 J	749536.11	749536.23	749536.38	0.0072	0.0044



Mercury	-2661-05-11 19:26 J	749624.16	749624.31	749624.47	0.0072	0.0032
Mercury	-2661-08-07 21:21 J	749712.22	749712.39	749712.56	0.0072	0.0021
Mercury	-2661-11-03 23:02 J	749800.29	749800.46	749800.63	0.0072	0.0011
Mercury	-2660-01-31 00:43 J	749888.36	749888.53	749888.71	0.0072	0.0001
Mercury	-2660-04-29 02:23 J	749976.43	749976.60	749976.78	0.0072	0.0011
Mercury	-2660-07-26 04:04 J	750064.51	750064.67	750064.84	0.0072	0.0021
Mercury	-2660-10-22 05:31 J	750152.59	750152.73	750152.90	0.0072	0.0032
Mercury	-2659-01-18 07:26 J	750240.67	750240.81	750240.95	0.0071	0.0042
Mercury	-2659-04-16 09:07 J	750328.76	750328.88	750329.00	0.0071	0.0052
Mercury	-2659-07-13 10:19 J	750416.87	750416.93	750417.03	0.0071	0.0062
Moon	-2516-11-30 20:23 J	802788.25	802788.35	802788.51	0.0065	0.0057
Earth	-2516-11-30 23:45 J	802788.37	802788.49	802788.65	0.0065	0.0055 *
Earth	-2515-12-02 11:31 J	803154.81	803154.98	803155.19	0.0066	0.0044
Moon	-2515-12-02 12:57 J	803154.87	803155.04	803155.25	0.0066	0.0046 *
Venus	-2514-12-29 20:38 J	803547.24	803547.36	803547.52	0.0066	0.0050
Venus	-2513-08-11 01:40 J	803772.36	803772.57	803772.79	0.0066	0.0014
Venus	-2512-03-24 06:28 J	803997.57	803997.77	803997.98	0.0067	0.0024
Venus	-2512-11-04 11:02 J	804222.90	804222.96	804223.07	0.0067	0.0062
Mercury	-2501-05-16 18:28 J	808069.25	808069.27	808069.32	0.0072	0.0070
Mercury	-2501-08-12 19:26 J	808157.25	808157.31	808157.40	0.0072	0.0061
Mercury	-2501-11-08 20:38 J	808245.27	808245.36	808245.46	0.0072	0.0052
Mercury	-2500-02-04 21:36 J	808333.29	808333.40	808333.52	0.0072	0.0043
Mercury	-2500-05-03 22:33 J	808421.32	808421.44	808421.57	0.0072	0.0035
Mercury	-2500-07-30 23:45 J	808509.35	808509.49	808509.62	0.0072	0.0026
Mercury	-2500-10-27 00:43 J	808597.39	808597.53	808597.67	0.0072	0.0017
Mercury	-2499-01-23 01:40 J	808685.43	808685.57	808685.71	0.0073	0.0008
Mercury	-2499-04-21 02:38 J	808773.47	808773.61	808773.76	0.0073	0.0002
Mercury	-2499-07-18 03:36 J	808861.51	808861.65	808861.80	0.0073	0.0011
Mercury	-2499-10-14 04:47 J	808949.56	808949.70	808949.84	0.0073	0.0020
Mercury	-2498-01-10 05:31 J	809037.61	809037.73	809037.88	0.0073	0.0030

Mercury	-2498-04-08 06:43 J	809125.66	809125.78	809125.91	0.0073	0.0039
Mercury	-2498-07-05 07:55 J	809213.72	809213.83	809213.94	0.0073	0.0049
Mercury	-2498-10-01 08:38 J	809301.79	809301.86	809301.96	0.0073	0.0059
Mercury	-2498-12-28 10:04 J	809389.87	809389.92	809389.98	0.0073	0.0068
Saturn	-2430-10-18 20:38 J	834155.85	834156.36	834157.00	0.0080	0.0050
Earth	-2428-06-03 10:19 J	834749.92	834749.93	834749.98	0.0079	0.0078
Venus	-2426-01-16 19:26 J	835342.17	835342.31	835342.49	0.0078	0.0054
Venus	-2426-08-30 05:45 J	835567.52	835567.74	835567.96	0.0078	0.0008
Mars	-2426-12-02 02:52 J	835661.37	835661.62	835661.92	0.0078	0.0027
Venus	-2425-04-11 15:36 J	835793.05	835793.15	835793.26	0.0078	0.0068
Mercury	-2416-07-17 02:38 J	839176.60	839176.61	839176.64	0.0073	0.0072
Mercury	-2416-10-13 04:19 J	839264.60	839264.68	839264.79	0.0073	0.0061
Mercury	-2415-01-09 06:14 J	839352.64	839352.76	839352.90	0.0072	0.0050
Mercury	-2415-04-07 07:55 J	839440.70	839440.83	839440.99	0.0072	0.0039
Mercury	-2415-07-04 09:50 J	839528.76	839528.91	839529.08	0.0072	0.0028
Mercury	-2415-09-30 11:45 J	839616.82	839616.99	839617.16	0.0072	0.0016
Mercury	-2415-12-27 13:26 J	839704.89	839705.06	839705.24	0.0072	0.0006
Mercury	-2414-03-25 15:21 J	839792.96	839793.14	839793.31	0.0072	0.0005
Mercury	-2414-06-21 16:47 J	839881.04	839881.20	839881.38	0.0072	0.0016
Mercury	-2414-09-17 18:28 J	839969.12	839969.27	839969.44	0.0072	0.0026
Mercury	-2414-12-14 19:55 J	840057.20	840057.33	840057.49	0.0071	0.0037
Mercury	-2413-03-11 21:50 J	840145.29	840145.41	840145.55	0.0071	0.0047
Mercury	-2413-06-07 23:31 J	840233.38	840233.48	840233.59	0.0071	0.0057
Mercury	-2413-09-04 00:43 J	840321.50	840321.53	840321.61	0.0071	0.0067
Earth	-2270-12-02 23:02 J	892641.34	892641.46	892641.63	0.0065	0.0054
Moon	-2270-12-03 01:12 J	892641.46	892641.55	892641.71	0.0065	0.0057 *
Jupiter	-2269-01-26 14:52 J	892695.73	892696.12	892696.58	0.0065	0.0043
Moon	-2269-12-03 07:26 J	893007.66	893007.81	893008.01	0.0066	0.0048
Earth	-2269-12-03 11:02 J	893007.80	893007.96	893008.18	0.0066	0.0045 *
Venus	-2267-01-27 04:33 J	893427.58	893427.69	893427.80	0.0066	0.0057

Venus	-2267-09-09 09:07 J	893652.69	893652.88	893653.10	0.0066	0.0020
Venus	-2266-04-22 13:55 J	893877.88	893878.08	893878.31	0.0067	0.0018
Venus	-2266-12-03 18:57 J	894103.18	894103.29	894103.42	0.0067	0.0055
Mercury	-2255-07-09 09:36 J	897973.85	897973.90	897973.95	0.0072	0.0066
Mercury	-2255-10-05 10:19 J	898061.86	898061.93	898062.03	0.0072	0.0058
Mercury	-2254-01-01 11:16 J	898149.88	898149.97	898150.09	0.0072	0.0049
Mercury	-2254-03-30 12:14 J	898237.90	898238.01	898238.14	0.0072	0.0040
Mercury	-2254-06-26 13:26 J	898325.93	898326.06	898326.19	0.0072	0.0031
Mercury	-2254-09-22 14:23 J	898413.97	898414.10	898414.24	0.0072	0.0022
Mercury	-2254-12-19 15:21 J	898502.00	898502.14	898502.29	0.0072	0.0014
Mercury	-2253-03-16 16:33 J	898590.04	898590.19	898590.33	0.0073	0.0004
Mercury	-2253-06-12 17:31 J	898678.09	898678.23	898678.38	0.0073	0.0005
Mercury	-2253-09-08 18:28 J	898766.13	898766.27	898766.42	0.0073	0.0015
Mercury	-2253-12-05 19:26 J	898854.18	898854.31	898854.45	0.0073	0.0024
Mercury	-2252-03-03 20:38 J	898942.23	898942.36	898942.49	0.0073	0.0033
Mercury	-2252-05-30 21:21 J	899030.29	899030.39	899030.52	0.0073	0.0043
Mercury	-2252-08-26 22:33 J	899118.35	899118.44	899118.55	0.0073	0.0053
Mercury	-2252-11-22 23:31 J	899206.42	899206.48	899206.57	0.0073	0.0062
Mercury	-2251-02-19 00:43 J	899294.51	899294.53	899294.57	0.0074	0.0072
Moon	-2182-06-05 05:16 J	924602.72	924602.72	924602.72	0.0079	0.0079
Earth	-2182-06-05 08:23 J	924602.80	924602.85	924602.93	0.0079	0.0077
Venus	-2180-02-14 03:21 J	925222.52	925222.64	925222.81	0.0078	0.0059
Venus	-2180-09-27 13:40 J	925447.85	925448.07	925448.30	0.0078	0.0003
Mars	-2179-04-24 19:12 J	925657.10	925657.30	925657.56	0.0078	0.0048
Venus	-2179-05-10 23:31 J	925673.36	925673.48	925673.61	0.0078	0.0063
Mercury	-2170-09-08 16:47 J	929081.15	929081.20	929081.28	0.0073	0.0067
Mercury	-2170-12-05 18:43 J	929169.18	929169.28	929169.40	0.0072	0.0056
Mercury	-2169-03-02 20:38 J	929257.23	929257.36	929257.50	0.0072	0.0044
Mercury	-2169-05-29 22:19 J	929345.29	929345.43	929345.60	0.0072	0.0034
Mercury	-2169-08-26 00:14 J	929433.35	929433.51	929433.68	0.0072	0.0023

Mercury	-2169-11-22 01:55 J	929521.42	929521.58	929521.76	0.0072	0.0012
Mercury	-2168-02-18 03:50 J	929609.49	929609.66	929609.83	0.0072	0.0001
Mercury	-2168-05-17 05:31 J	929697.56	929697.73	929697.91	0.0072	0.0010
Mercury	-2168-08-13 06:57 J	929785.64	929785.79	929785.97	0.0072	0.0021
Mercury	-2168-11-09 08:52 J	929873.72	929873.87	929874.03	0.0071	0.0031
Mercury	-2167-02-05 10:19 J	929961.80	929961.93	929962.09	0.0071	0.0041
Mercury	-2167-05-04 12:00 J	930049.90	930050.00	930050.13	0.0071	0.0052
Mercury	-2167-07-31 13:40 J	930138.00	930138.07	930138.17	0.0071	0.0062
Earth	-2024-12-03 20:09 J	982494.26	982494.34	982494.45	0.0065	0.0061
Moon	-2024-12-03 21:50 J	982494.37	982494.41	982494.49	0.0065	0.0064 *
Earth	-2023-12-05 08:09 J	982860.64	982860.84	982861.07	0.0066	0.0037
Moon	-2023-12-05 08:09 J	982860.67	982860.84	982861.06	0.0066	0.0041 *
Venus	-2021-10-07 14:52 J	983532.93	983533.12	983533.32	0.0066	0.0032
Venus	-2020-05-20 19:40 J	983758.11	983758.32	983758.54	0.0067	0.0006
Venus	-2019-01-01 00:43 J	983983.36	983983.53	983983.69	0.0067	0.0043
Mercury	-2009-08-30 23:16 J	987878.43	987878.47	987878.54	0.0072	0.0067
Mercury	-2009-11-27 00:28 J	987966.44	987966.52	987966.61	0.0072	0.0058
Mercury	-2008-02-23 01:26 J	988054.46	988054.56	988054.67	0.0072	0.0049
Mercury	-2008-05-22 02:23 J	988142.49	988142.60	988142.72	0.0072	0.0040
Mercury	-2008-08-18 03:36 J	988230.52	988230.65	988230.78	0.0072	0.0032
Mercury	-2008-11-14 04:33 J	988318.55	988318.69	988318.82	0.0072	0.0023
Mercury	-2007-02-10 05:31 J	988406.59	988406.73	988406.87	0.0072	0.0014
Mercury	-2007-05-09 06:28 J	988494.63	988494.77	988494.92	0.0073	0.0005
Mercury	-2007-08-05 07:26 J	988582.67	988582.81	988582.96	0.0073	0.0005
Mercury	-2007-11-01 08:23 J	988670.71	988670.85	988671.00	0.0073	0.0014
Mercury	-2006-01-28 09:36 J	988758.76	988758.90	988759.04	0.0073	0.0023
Mercury	-2006-04-26 10:19 J	988846.81	988846.93	988847.07	0.0073	0.0033
Mercury	-2006-07-23 11:31 J	988934.87	988934.98	988935.11	0.0073	0.0042
Mercury	-2006-10-19 12:28 J	989022.93	989023.02	989023.13	0.0073	0.0052
Mercury	-2005-01-15 13:40 J	989111.00	989111.07	989111.15	0.0073	0.0062

Mercury -2005-04-12 14:38 J 989199.09 989199.11 989199.15 0.0074 0.0072

# 2ND MILLENNIUM BCE

**This is a list of transits visible from Pluto in the 2nd millennium BCE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	-1935-06-08 03:50 J		1014822.65	1014822.66	1014822.73	0.0079	0.0078	
Venus	-1934-10-26 17:31 J		1015328.02	1015328.23	1015328.46	0.0078	0.0017	
Venus	-1933-06-08 03:21 J		1015553.46	1015553.64	1015553.83	0.0078	0.0044	
Mercury	-1924-10-31 05:45 J		1018985.70	1018985.74	1018985.81	0.0073	0.0069	
Mercury	-1923-01-27 07:26 J		1019073.72	1019073.81	1019073.94	0.0072	0.0058	
Mercury	-1923-04-25 09:21 J		1019161.77	1019161.89	1019162.04	0.0072	0.0046	
Mercury	-1923-07-22 11:02 J		1019249.83	1019249.96	1019250.13	0.0072	0.0036	
Mercury	-1923-10-18 12:57 J		1019337.89	1019338.04	1019338.22	0.0072	0.0024	
Mercury	-1922-01-14 14:52 J		1019425.95	1019426.12	1019426.30	0.0072	0.0013	
Mercury	-1922-04-12 16:47 J		1019514.02	1019514.20	1019514.37	0.0072	0.0002	
Mercury	-1922-07-09 18:28 J		1019602.10	1019602.27	1019602.44	0.0072	0.0008	
Mercury	-1922-10-05 20:09 J		1019690.17	1019690.34	1019690.51	0.0072	0.0019	
Mercury	-1921-01-01 21:36 J		1019778.25	1019778.40	1019778.57	0.0072	0.0030	
Mercury	-1921-03-29 23:31 J		1019866.34	1019866.48	1019866.63	0.0071	0.0040	
Mercury	-1921-06-26 00:57 J		1019954.43	1019954.54	1019954.67	0.0071	0.0050	
Mercury	-1921-09-22 02:38 J		1020042.53	1020042.61	1020042.71	0.0071	0.0061	
Mercury	-1921-12-19 04:33 J		1020130.67	1020130.69	1020130.71	0.0071	0.0070	

Earth	-1777-12-06 01:12 J	1072713.32	1072713.55	1072713.82	0.0066	0.0018
Moon	-1777-12-06 04:47 J	1072713.47	1072713.70	1072713.96	0.0066	0.0021 *
Venus	-1775-11-05 17:45 J	1073413.12	1073413.24	1073413.40	0.0066	0.0051
Venus	-1774-06-18 22:33 J	1073638.24	1073638.44	1073638.67	0.0067	0.0014
Venus	-1773-01-30 03:35 J	1073863.45	1073863.65	1073863.86	0.0067	0.0024
Venus	-1773-09-11 08:24 J	1074088.79	1074088.85	1074088.94	0.0067	0.0062
Mercury	-1763-10-23 12:43 J	1077783.02	1077783.03	1077783.06	0.0072	0.0071
Mercury	-1762-01-19 13:55 J	1077871.01	1077871.08	1077871.15	0.0072	0.0062
Mercury	-1762-04-17 14:24 J	1077959.02	1077959.10	1077959.21	0.0072	0.0054
Mercury	-1762-07-14 15:35 J	1078047.05	1078047.15	1078047.27	0.0072	0.0045
Mercury	-1762-10-10 16:33 J	1078135.07	1078135.19	1078135.32	0.0072	0.0036
Mercury	-1761-01-06 17:31 J	1078223.11	1078223.23	1078223.37	0.0072	0.0027
Mercury	-1761-04-03 18:28 J	1078311.14	1078311.27	1078311.42	0.0072	0.0019
Mercury	-1761-06-30 19:40 J	1078399.18	1078399.32	1078399.47	0.0072	0.0009
Mercury	-1761-09-26 20:38 J	1078487.22	1078487.36	1078487.51	0.0073	0.0002
Mercury	-1761-12-23 21:35 J	1078575.26	1078575.40	1078575.55	0.0073	0.0010
Mercury	-1760-03-21 22:33 J	1078663.31	1078663.44	1078663.59	0.0073	0.0019
Mercury	-1760-06-17 23:45 J	1078751.36	1078751.49	1078751.63	0.0073	0.0028
Mercury	-1760-09-14 00:28 J	1078839.41	1078839.52	1078839.66	0.0073	0.0038
Mercury	-1760-12-11 01:40 J	1078927.47	1078927.57	1078927.69	0.0073	0.0047
Mercury	-1759-03-09 02:52 J	1079015.53	1079015.62	1079015.71	0.0073	0.0057
Mercury	-1759-06-05 03:50 J	1079103.61	1079103.66	1079103.73	0.0073	0.0067
Moon	-1689-06-08 16:04 J	1104674.97	1104675.17	1104675.38	0.0079	0.0045
Earth	-1689-06-08 16:33 J	1104674.97	1104675.19	1104675.42	0.0079	0.0041 *
Venus	-1688-11-23 19:40 J	1105208.14	1105208.32	1105208.51	0.0078	0.0043
Venus	-1687-07-07 05:31 J	1105433.52	1105433.73	1105433.95	0.0078	0.0018
Mercury	-1677-03-20 19:55 J	1108978.25	1108978.33	1108978.43	0.0073	0.0062
Mercury	-1677-06-16 21:35 J	1109066.29	1109066.40	1109066.54	0.0072	0.0051
Mercury	-1677-09-12 23:31 J	1109154.34	1109154.48	1109154.63	0.0072	0.0040
Mercury	-1677-12-10 01:26 J	1109242.40	1109242.56	1109242.72	0.0072	0.0028

Mercury	-1676-03-08 03:07 J	1109330.46	1109330.63	1109330.80	0.0072	0.0017
Mercury	-1676-06-04 04:47 J	1109418.53	1109418.70	1109418.88	0.0072	0.0007
Mercury	-1676-08-31 06:43 J	1109506.60	1109506.78	1109506.95	0.0072	0.0004
Mercury	-1676-11-27 08:24 J	1109594.68	1109594.85	1109595.02	0.0072	0.0015
Mercury	-1675-02-23 09:50 J	1109682.76	1109682.91	1109683.09	0.0072	0.0026
Mercury	-1675-05-22 11:31 J	1109770.84	1109770.98	1109771.14	0.0071	0.0036
Mercury	-1675-08-18 13:12 J	1109858.93	1109859.05	1109859.19	0.0071	0.0047
Mercury	-1675-11-14 15:07 J	1109947.03	1109947.13	1109947.24	0.0071	0.0057
Mercury	-1674-02-10 16:19 J	1110035.14	1110035.18	1110035.26	0.0071	0.0067
Moon	-1531-12-07 13:55 J	1162565.83	1162566.08	1162566.35	0.0065	0.0009
Earth	-1531-12-07 16:04 J	1162565.93	1162566.17	1162566.44	0.0065	0.0011 *
Venus	-1528-07-16 23:45 J	1163518.33	1163518.49	1163518.69	0.0066	0.0039
Venus	-1527-02-27 05:02 J	1163743.49	1163743.71	1163743.93	0.0067	0.0001
Venus	-1527-10-10 09:50 J	1163968.74	1163968.91	1163969.10	0.0067	0.0037
Mercury	-1516-03-13 01:55 J	1167775.58	1167775.58	1167775.63	0.0072	0.0071
Mercury	-1516-06-09 03:07 J	1167863.57	1167863.63	1167863.71	0.0072	0.0062
Mercury	-1516-09-05 04:04 J	1167951.59	1167951.67	1167951.78	0.0072	0.0053
Mercury	-1516-12-02 05:02 J	1168039.61	1168039.71	1168039.83	0.0072	0.0044
Mercury	-1515-02-28 06:14 J	1168127.64	1168127.76	1168127.89	0.0072	0.0035
Mercury	-1515-05-27 07:12 J	1168215.67	1168215.80	1168215.93	0.0072	0.0026
Mercury	-1515-08-23 08:09 J	1168303.70	1168303.84	1168303.98	0.0072	0.0017
Mercury	-1515-11-19 09:07 J	1168391.74	1168391.88	1168392.03	0.0072	0.0008
Mercury	-1514-02-15 10:04 J	1168479.78	1168479.92	1168480.07	0.0073	0.0002
Mercury	-1514-05-14 11:02 J	1168567.82	1168567.96	1168568.11	0.0073	0.0010
Mercury	-1514-08-10 12:00 J	1168655.87	1168656.00	1168656.15	0.0073	0.0020
Mercury	-1514-11-06 12:57 J	1168743.92	1168744.04	1168744.18	0.0073	0.0029
Mercury	-1513-02-02 14:09 J	1168831.97	1168832.09	1168832.22	0.0073	0.0038
Mercury	-1513-04-30 14:52 J	1168920.03	1168920.12	1168920.24	0.0073	0.0048
Mercury	-1513-07-27 16:04 J	1169008.09	1169008.17	1169008.27	0.0073	0.0058
Mercury	-1513-10-23 17:02 J	1169096.17	1169096.21	1169096.28	0.0073	0.0067

Earth	-1443-06-09 20:38 J	1194527.12	1194527.36	1194527.62	0.0079	0.0025
Moon	-1443-06-10 00:00 J	1194527.26	1194527.50	1194527.77	0.0079	0.0022 *
Venus	-1441-08-04 02:52 J	1195313.42	1195313.62	1195313.84	0.0078	0.0025
Venus	-1440-03-17 12:43 J	1195538.84	1195539.03	1195539.24	0.0078	0.0036
Mercury	-1431-08-09 07:55 J	1198970.76	1198970.83	1198970.92	0.0073	0.0064
Mercury	-1431-11-05 09:35 J	1199058.80	1199058.90	1199059.04	0.0072	0.0053
Mercury	-1430-02-01 11:31 J	1199146.85	1199146.98	1199147.13	0.0072	0.0041
Mercury	-1430-04-30 13:26 J	1199234.91	1199235.06	1199235.23	0.0072	0.0030
Mercury	-1430-07-27 15:07 J	1199322.97	1199323.13	1199323.31	0.0072	0.0019
Mercury	-1430-10-23 17:02 J	1199411.04	1199411.21	1199411.39	0.0072	0.0008
Mercury	-1429-01-19 18:57 J	1199499.11	1199499.29	1199499.46	0.0072	0.0003
Mercury	-1429-04-16 20:24 J	1199587.19	1199587.35	1199587.53	0.0072	0.0014
Mercury	-1429-07-13 22:04 J	1199675.27	1199675.42	1199675.60	0.0072	0.0025
Mercury	-1429-10-10 00:00 J	1199763.35	1199763.50	1199763.65	0.0071	0.0035
Mercury	-1428-01-06 01:26 J	1199851.44	1199851.56	1199851.71	0.0071	0.0045
Mercury	-1428-04-04 03:21 J	1199939.54	1199939.64	1199939.75	0.0071	0.0056
Mercury	-1428-07-01 04:33 J	1200027.65	1200027.69	1200027.78	0.0071	0.0066
Moon	-1285-12-08 01:12 J	1252418.42	1252418.55	1252418.73	0.0065	0.0050
Earth	-1285-12-08 03:21 J	1252418.48	1252418.64	1252418.80	0.0065	0.0051 *
Moon	-1284-12-09 14:24 J	1252784.94	1252785.10	1252785.31	0.0066	0.0047
Earth	-1284-12-09 14:38 J	1252784.95	1252785.11	1252785.31	0.0066	0.0047 *
Venus	-1281-03-27 04:04 J	1253623.49	1253623.67	1253623.87	0.0066	0.0033
Venus	-1281-11-07 09:07 J	1253848.67	1253848.88	1253849.10	0.0067	0.0005
Venus	-1280-06-20 13:40 J	1254073.92	1254074.07	1254074.26	0.0067	0.0043
Mercury	-1270-10-28 16:04 J	1257856.12	1257856.17	1257856.23	0.0072	0.0065
Mercury	-1269-01-24 16:47 J	1257944.12	1257944.20	1257944.30	0.0072	0.0057
Mercury	-1269-04-21 17:45 J	1258032.15	1258032.24	1258032.36	0.0072	0.0048
Mercury	-1269-07-18 18:43 J	1258120.17	1258120.28	1258120.41	0.0072	0.0039
Mercury	-1269-10-14 19:40 J	1258208.20	1258208.32	1258208.46	0.0072	0.0030
Mercury	-1268-01-10 20:38 J	1258296.23	1258296.36	1258296.51	0.0072	0.0022



Mercury	-1268-04-08 21:50 J	1258384.27	1258384.41	1258384.55	0.0072	0.0012
Mercury	-1268-07-05 22:47 J	1258472.31	1258472.45	1258472.60	0.0072	0.0003
Mercury	-1268-10-01 23:45 J	1258560.35	1258560.49	1258560.64	0.0073	0.0007
Mercury	-1268-12-29 00:43 J	1258648.40	1258648.53	1258648.68	0.0073	0.0016
Mercury	-1267-03-27 01:40 J	1258736.44	1258736.57	1258736.71	0.0073	0.0025
Mercury	-1267-06-23 02:52 J	1258824.49	1258824.62	1258824.75	0.0073	0.0034
Mercury	-1267-09-19 03:35 J	1258912.55	1258912.65	1258912.78	0.0073	0.0044
Mercury	-1267-12-16 04:47 J	1259000.61	1259000.70	1259000.80	0.0073	0.0054
Mercury	-1266-03-14 05:45 J	1259088.68	1259088.74	1259088.82	0.0073	0.0063
Mercury	-1266-06-10 06:43 J	1259176.78	1259176.78	1259176.81	0.0073	0.0073
Earth	-1196-06-12 01:12 J	1284746.49	1284746.55	1284746.68	0.0079	0.0074
Moon	-1196-06-12 04:47 J	1284746.63	1284746.70	1284746.82	0.0079	0.0073 *
Venus	-1195-09-01 22:19 J	1285193.38	1285193.43	1285193.49	0.0078	0.0076
Venus	-1194-04-15 08:24 J	1285418.64	1285418.85	1285419.07	0.0078	0.0014
Venus	-1194-11-26 18:00 J	1285644.08	1285644.25	1285644.44	0.0077	0.0047
Mercury	-1185-12-27 19:12 J	1288963.26	1288963.30	1288963.37	0.0073	0.0069
Mercury	-1184-03-25 20:52 J	1289051.28	1289051.37	1289051.50	0.0072	0.0058
Mercury	-1184-06-21 23:16 J	1289139.33	1289139.47	1289139.60	0.0072	0.0046
Mercury	-1184-09-18 00:57 J	1289227.39	1289227.54	1289227.70	0.0072	0.0035
Mercury	-1184-12-15 02:52 J	1289315.45	1289315.62	1289315.78	0.0072	0.0023
Mercury	-1183-03-13 04:33 J	1289403.52	1289403.69	1289403.86	0.0072	0.0012
Mercury	-1183-06-09 06:14 J	1289491.59	1289491.76	1289491.94	0.0072	0.0003
Mercury	-1183-09-05 07:55 J	1289579.67	1289579.83	1289580.01	0.0072	0.0010
Mercury	-1183-12-02 09:50 J	1289667.74	1289667.91	1289668.08	0.0072	0.0020
Mercury	-1182-02-28 11:31 J	1289755.83	1289755.98	1289756.14	0.0072	0.0031
Mercury	-1182-05-27 12:57 J	1289843.91	1289844.04	1289844.20	0.0071	0.0042
Mercury	-1182-08-23 14:52 J	1289932.01	1289932.12	1289932.24	0.0071	0.0052
Mercury	-1182-11-19 16:19 J	1290020.11	1290020.18	1290020.28	0.0071	0.0062
Moon	-1038-12-10 20:38 J	1342637.11	1342637.36	1342637.62	0.0065	0.0002
Earth	-1038-12-11 00:00 J	1342637.25	1342637.50	1342637.76	0.0065	0.0000 *

Venus	-1035-12-06 06:28 J	1343728.60	1343728.77	1343728.98	0.0066	0.0032
Venus	-1034-07-19 11:31 J	1343953.77	1343953.98	1343954.21	0.0067	0.0007
Venus	-1033-02-29 16:04 J	1344179.04	1344179.17	1344179.36	0.0067	0.0045
Mercury	-1023-03-18 04:19 J	1347848.67	1347848.68	1347848.70	0.0071	0.0071
Mercury	-1023-06-14 05:02 J	1347936.66	1347936.71	1347936.79	0.0072	0.0063
Mercury	-1023-09-10 06:00 J	1348024.67	1348024.75	1348024.86	0.0072	0.0054
Mercury	-1023-12-07 06:57 J	1348112.69	1348112.79	1348112.91	0.0072	0.0045
Mercury	-1022-03-05 07:55 J	1348200.72	1348200.83	1348200.96	0.0072	0.0036
Mercury	-1022-06-01 09:07 J	1348288.75	1348288.88	1348289.01	0.0072	0.0027
Mercury	-1022-08-28 10:04 J	1348376.78	1348376.92	1348377.06	0.0072	0.0018
Mercury	-1022-11-24 11:02 J	1348464.82	1348464.96	1348465.11	0.0072	0.0009
Mercury	-1021-02-20 12:00 J	1348552.86	1348553.00	1348553.15	0.0072	0.0002
Mercury	-1021-05-18 12:57 J	1348640.90	1348641.04	1348641.19	0.0073	0.0010
Mercury	-1021-08-14 13:55 J	1348728.95	1348729.08	1348729.23	0.0073	0.0019
Mercury	-1021-11-10 14:52 J	1348817.00	1348817.12	1348817.26	0.0073	0.0028
Mercury	-1020-02-06 15:50 J	1348905.05	1348905.16	1348905.29	0.0073	0.0038
Mercury	-1020-05-05 16:47 J	1348993.10	1348993.20	1348993.32	0.0073	0.0048
Mercury	-1020-08-01 18:14 J	1349081.17	1349081.26	1349081.35	0.0073	0.0057
Mercury	-1020-10-28 18:57 J	1349169.24	1349169.29	1349169.36	0.0073	0.0067

# 1ST MILLENNIUM BCE

This is a list of transits visible from Pluto in the 1st millennium BCE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Moon	-950-06-12 21:35 J	1374598.15	1374598.40	1374598.67	0.0079	0.0024
Earth	-950-06-12 21:50 J	1374598.17	1374598.41	1374598.67	0.0079	0.0025 *
Venus	-948-05-13 00:43 J	1375298.48	1375298.53	1375298.59	0.0078	0.0075
Venus	-948-12-24 10:33 J	1375523.73	1375523.94	1375524.17	0.0078	0.0014
Mars	-947-04-10 00:14 J	1375630.27	1375630.51	1375630.79	0.0078	0.0037
Venus	-947-08-06 20:09 J	1375749.17	1375749.34	1375749.53	0.0077	0.0047
Mercury	-938-08-14 06:57 J	1379043.75	1379043.79	1379043.87	0.0073	0.0068
Mercury	-938-11-10 08:38 J	1379131.78	1379131.86	1379132.00	0.0072	0.0057
Mercury	-937-02-06 11:02 J	1379219.82	1379219.96	1379220.10	0.0072	0.0045
Mercury	-937-05-04 12:43 J	1379307.88	1379308.03	1379308.19	0.0072	0.0034
Mercury	-937-07-31 14:38 J	1379395.95	1379396.11	1379396.28	0.0072	0.0022
Mercury	-937-10-27 16:33 J	1379484.01	1379484.19	1379484.36	0.0072	0.0011
Mercury	-936-01-23 18:14 J	1379572.08	1379572.26	1379572.44	0.0072	0.0000
Mercury	-936-04-21 19:55 J	1379660.16	1379660.33	1379660.51	0.0072	0.0011
Mercury	-936-07-18 21:35 J	1379748.24	1379748.40	1379748.57	0.0072	0.0021
Mercury	-936-10-14 23:31 J	1379836.32	1379836.48	1379836.63	0.0071	0.0032
Mercury	-935-01-11 00:57 J	1379924.41	1379924.54	1379924.69	0.0071	0.0043
Mercury	-935-04-09 02:24 J	1380012.51	1380012.60	1380012.74	0.0071	0.0054
Mercury	-935-07-06 04:19 J	1380100.61	1380100.68	1380100.77	0.0071	0.0063
Earth	-792-12-11 04:47 J	1432489.62	1432489.70	1432489.83	0.0065	0.0059
Moon	-792-12-11 07:12 J	1432489.70	1432489.80	1432489.95	0.0065	0.0056 *
Moon	-791-12-12 13:26 J	1432855.85	1432856.06	1432856.28	0.0065	0.0034
Earth	-791-12-12 16:47 J	1432856.01	1432856.20	1432856.43	0.0065	0.0038 *
Venus	-788-08-16 06:57 J	1433833.61	1433833.79	1433833.97	0.0066	0.0038
Venus	-787-03-29 11:45 J	1434058.78	1434058.99	1434059.21	0.0067	0.0001
Venus	-787-11-09 16:33 J	1434284.03	1434284.19	1434284.39	0.0067	0.0038
Mercury	-776-01-28 17:31 J	1438017.17	1438017.23	1438017.30	0.0072	0.0064
Mercury	-776-04-26 18:14 J	1438105.19	1438105.26	1438105.36	0.0072	0.0056
Mercury	-776-07-23 19:12 J	1438193.21	1438193.30	1438193.42	0.0072	0.0047

Mercury	-776-10-19 20:09 J	1438281.23	1438281.34	1438281.47	0.0072	0.0038
Mercury	-775-01-15 21:21 J	1438369.26	1438369.39	1438369.52	0.0072	0.0029
Mercury	-775-04-13 22:19 J	1438457.30	1438457.43	1438457.57	0.0072	0.0020
Mercury	-775-07-10 23:16 J	1438545.33	1438545.47	1438545.61	0.0072	0.0011
Mercury	-775-10-07 00:14 J	1438633.37	1438633.51	1438633.66	0.0072	0.0002
Mercury	-774-01-03 01:12 J	1438721.41	1438721.55	1438721.70	0.0073	0.0008
Mercury	-774-04-01 02:09 J	1438809.46	1438809.59	1438809.74	0.0073	0.0017
Mercury	-774-06-28 03:07 J	1438897.50	1438897.63	1438897.77	0.0073	0.0026
Mercury	-774-09-24 04:04 J	1438985.55	1438985.67	1438985.81	0.0073	0.0036
Mercury	-774-12-21 05:02 J	1439073.61	1439073.71	1439073.84	0.0073	0.0045
Mercury	-773-03-18 06:14 J	1439161.67	1439161.76	1439161.86	0.0073	0.0055
Mercury	-773-06-14 07:12 J	1439249.74	1439249.80	1439249.88	0.0073	0.0064
Earth	-703-06-14 18:14 J	1464817.06	1464817.26	1464817.51	0.0079	0.0041
Moon	-703-06-14 20:09 J	1464817.13	1464817.34	1464817.61	0.0079	0.0037 *
Mars	-701-08-29 19:55 J	1465624.07	1465624.33	1465624.61	0.0078	0.0028
Venus	-701-09-03 10:33 J	1465628.73	1465628.94	1465629.16	0.0078	0.0021
Venus	-700-04-16 20:24 J	1465854.17	1465854.35	1465854.55	0.0077	0.0040
Mercury	-691-03-30 18:28 J	1469124.23	1469124.27	1469124.32	0.0073	0.0070
Mercury	-691-06-26 20:09 J	1469212.25	1469212.34	1469212.46	0.0072	0.0059
Mercury	-691-09-22 22:19 J	1469300.30	1469300.43	1469300.57	0.0072	0.0047
Mercury	-691-12-20 00:00 J	1469388.36	1469388.50	1469388.66	0.0072	0.0036
Mercury	-690-03-18 01:55 J	1469476.42	1469476.58	1469476.75	0.0072	0.0024
Mercury	-690-06-14 03:50 J	1469564.49	1469564.66	1469564.83	0.0072	0.0013
Mercury	-690-09-10 05:31 J	1469652.56	1469652.73	1469652.91	0.0072	0.0003
Mercury	-690-12-07 07:12 J	1469740.63	1469740.80	1469740.98	0.0072	0.0009
Mercury	-689-03-04 08:52 J	1469828.71	1469828.87	1469829.05	0.0072	0.0020
Mercury	-689-05-31 10:33 J	1469916.79	1469916.94	1469917.11	0.0072	0.0031
Mercury	-689-08-27 12:28 J	1470004.88	1470005.02	1470005.17	0.0071	0.0041
Mercury	-689-11-23 13:55 J	1470092.97	1470093.08	1470093.21	0.0071	0.0052
Mercury	-688-02-19 15:21 J	1470181.08	1470181.14	1470181.25	0.0071	0.0062

Earth	-545-12-12 20:09 J	1522708.11	1522708.34	1522708.57	0.0065	0.0029
Moon	-545-12-12 20:38 J	1522708.17	1522708.36	1522708.60	0.0065	0.0032 *
Venus	-541-04-26 05:31 J	1523938.58	1523938.73	1523938.88	0.0066	0.0049
Venus	-541-12-07 10:04 J	1524163.72	1524163.92	1524164.15	0.0067	0.0012
Venus	-540-07-20 14:52 J	1524388.93	1524389.12	1524389.34	0.0067	0.0027
Venus	-539-03-02 19:55 J	1524614.30	1524614.33	1524614.39	0.0067	0.0066
Mercury	-530-09-15 05:16 J	1528097.69	1528097.72	1528097.77	0.0071	0.0069
Mercury	-530-12-12 06:14 J	1528185.69	1528185.76	1528185.84	0.0072	0.0060
Mercury	-529-03-09 06:57 J	1528273.71	1528273.79	1528273.90	0.0072	0.0052
Mercury	-529-06-05 07:55 J	1528361.73	1528361.83	1528361.96	0.0072	0.0043
Mercury	-529-09-01 08:52 J	1528449.76	1528449.87	1528450.01	0.0072	0.0034
Mercury	-529-11-28 09:50 J	1528537.79	1528537.91	1528538.06	0.0072	0.0025
Mercury	-528-02-24 11:02 J	1528625.82	1528625.96	1528626.10	0.0072	0.0016
Mercury	-528-05-23 12:00 J	1528713.86	1528714.00	1528714.14	0.0072	0.0007
Mercury	-528-08-19 12:57 J	1528801.90	1528802.04	1528802.19	0.0072	0.0003
Mercury	-528-11-15 13:55 J	1528889.94	1528890.08	1528890.23	0.0073	0.0012
Mercury	-527-02-11 14:52 J	1528977.99	1528978.12	1528978.26	0.0073	0.0021
Mercury	-527-05-10 15:50 J	1529066.04	1529066.16	1529066.30	0.0073	0.0030
Mercury	-527-08-06 16:47 J	1529154.09	1529154.20	1529154.33	0.0073	0.0040
Mercury	-527-11-02 18:00 J	1529242.15	1529242.25	1529242.36	0.0073	0.0049
Mercury	-526-01-29 18:43 J	1529330.21	1529330.28	1529330.38	0.0073	0.0059
Mercury	-526-04-27 20:09 J	1529418.29	1529418.34	1529418.39	0.0073	0.0069
Venus	-454-05-15 07:55 J	1555733.64	1555733.83	1555734.02	0.0078	0.0040
Venus	-454-12-26 17:31 J	1555959.02	1555959.23	1555959.45	0.0077	0.0021
Mercury	-444-02-10 06:14 J	1559292.70	1559292.76	1559292.84	0.0073	0.0067
Mercury	-444-05-09 07:55 J	1559380.73	1559380.83	1559380.96	0.0072	0.0055
Mercury	-444-08-05 10:04 J	1559468.78	1559468.92	1559469.06	0.0072	0.0044
Mercury	-444-11-01 11:45 J	1559556.84	1559556.99	1559557.16	0.0072	0.0032
Mercury	-443-01-28 13:40 J	1559644.91	1559645.07	1559645.24	0.0072	0.0021
Mercury	-443-04-26 15:35 J	1559732.97	1559733.15	1559733.32	0.0072	0.0010

Mercury	-443-07-23 17:16 J	1559821.05	1559821.22	1559821.40	0.0072	0.0002
Mercury	-443-10-19 19:12 J	1559909.12	1559909.30	1559909.47	0.0072	0.0012
Mercury	-442-01-15 20:52 J	1559997.20	1559997.37	1559997.54	0.0072	0.0023
Mercury	-442-04-13 22:19 J	1560085.29	1560085.43	1560085.60	0.0071	0.0034
Mercury	-442-07-11 00:00 J	1560173.38	1560173.50	1560173.65	0.0071	0.0045
Mercury	-442-10-07 01:26 J	1560261.47	1560261.56	1560261.70	0.0071	0.0056
Mercury	-441-01-03 03:21 J	1560349.59	1560349.64	1560349.72	0.0071	0.0065
Moon	-298-12-15 05:16 J	1612926.48	1612926.72	1612926.97	0.0065	0.0014
Earth	-298-12-15 05:45 J	1612926.50	1612926.74	1612927.00	0.0065	0.0015 *
Venus	-294-08-18 05:31 J	1614268.55	1614268.73	1614268.93	0.0067	0.0033
Mars	-294-10-24 22:33 J	1614336.11	1614336.44	1614336.79	0.0067	0.0007
Venus	-293-03-30 10:33 J	1614493.72	1614493.94	1614494.16	0.0067	0.0005
Venus	-293-11-10 15:21 J	1614718.98	1614719.14	1614719.32	0.0067	0.0043
Mercury	-283-07-28 16:47 J	1618266.20	1618266.20	1618266.23	0.0071	0.0071
Mercury	-283-10-24 18:00 J	1618354.18	1618354.25	1618354.32	0.0072	0.0062
Mercury	-282-01-20 18:43 J	1618442.20	1618442.28	1618442.38	0.0072	0.0054
Mercury	-282-04-18 19:40 J	1618530.22	1618530.32	1618530.44	0.0072	0.0045
Mercury	-282-07-15 20:38 J	1618618.24	1618618.36	1618618.49	0.0072	0.0036
Mercury	-282-10-11 21:35 J	1618706.27	1618706.40	1618706.54	0.0072	0.0027
Mercury	-281-01-07 22:33 J	1618794.31	1618794.44	1618794.58	0.0072	0.0018
Mercury	-281-04-04 23:31 J	1618882.34	1618882.48	1618882.63	0.0072	0.0009
Mercury	-281-07-02 00:28 J	1618970.38	1618970.52	1618970.67	0.0072	0.0002
Mercury	-281-09-28 01:26 J	1619058.42	1619058.56	1619058.71	0.0073	0.0010
Mercury	-281-12-25 02:24 J	1619146.47	1619146.60	1619146.74	0.0073	0.0019
Mercury	-280-03-23 03:21 J	1619234.51	1619234.64	1619234.78	0.0073	0.0029
Mercury	-280-06-19 04:19 J	1619322.57	1619322.68	1619322.81	0.0073	0.0038
Mercury	-280-09-15 05:31 J	1619410.62	1619410.73	1619410.84	0.0073	0.0047
Mercury	-280-12-12 06:14 J	1619498.68	1619498.76	1619498.86	0.0073	0.0057
Mercury	-279-03-10 07:26 J	1619586.76	1619586.81	1619586.87	0.0073	0.0067
Moon	-210-06-16 12:00 J	1644886.90	1644887.00	1644887.14	0.0079	0.0071

Earth	-210-06-16 15:21 J	1644887.05	1644887.14	1644887.28	0.0079	0.0072 *
Venus	-207-01-23 00:57 J	1645838.48	1645838.54	1645838.65	0.0078	0.0072
Venus	-207-09-05 11:02 J	1646063.75	1646063.96	1646064.19	0.0078	0.0011
Venus	-206-04-18 20:38 J	1646289.21	1646289.36	1646289.54	0.0077	0.0051
Mercury	-198-12-24 16:47 J	1649461.15	1649461.20	1649461.25	0.0073	0.0069
Mercury	-197-03-21 18:28 J	1649549.17	1649549.27	1649549.39	0.0072	0.0058
Mercury	-197-06-17 20:09 J	1649637.22	1649637.34	1649637.50	0.0072	0.0046
Mercury	-197-09-13 22:19 J	1649725.28	1649725.43	1649725.59	0.0072	0.0035
Mercury	-197-12-11 00:14 J	1649813.34	1649813.51	1649813.68	0.0072	0.0023
Mercury	-196-03-09 01:55 J	1649901.41	1649901.58	1649901.76	0.0072	0.0012
Mercury	-196-06-05 03:50 J	1649989.49	1649989.66	1649989.84	0.0072	0.0001
Mercury	-196-09-01 05:45 J	1650077.56	1650077.74	1650077.91	0.0072	0.0010
Mercury	-196-11-28 07:26 J	1650165.64	1650165.81	1650165.98	0.0072	0.0021
Mercury	-195-02-24 09:07 J	1650253.73	1650253.88	1650254.04	0.0071	0.0032
Mercury	-195-05-23 10:33 J	1650341.81	1650341.94	1650342.09	0.0071	0.0043
Mercury	-195-08-19 12:14 J	1650429.91	1650430.01	1650430.14	0.0071	0.0053
Mercury	-195-11-15 14:09 J	1650518.02	1650518.09	1650518.17	0.0071	0.0064
Moon	-51-12-16 11:31 J	1703144.73	1703144.98	1703145.23	0.0065	0.0007
Earth	-51-12-16 13:26 J	1703144.81	1703145.06	1703145.32	0.0065	0.0009 *
Venus	-47-04-27 23:02 J	1704373.39	1704373.46	1704373.58	0.0066	0.0060
Venus	-47-12-09 04:04 J	1704598.48	1704598.67	1704598.89	0.0067	0.0022
Venus	-46-07-22 08:52 J	1704823.67	1704823.87	1704824.10	0.0067	0.0017
Venus	-45-03-03 13:55 J	1705048.97	1705049.08	1705049.22	0.0067	0.0055
Mercury	-36-09-06 04:33 J	1708522.66	1708522.69	1708522.76	0.0071	0.0068
Mercury	-36-12-03 05:31 J	1708610.67	1708610.73	1708610.83	0.0072	0.0059
Mercury	-35-03-01 06:43 J	1708698.68	1708698.78	1708698.89	0.0072	0.0050
Mercury	-35-05-28 07:40 J	1708786.71	1708786.82	1708786.94	0.0072	0.0041
Mercury	-35-08-24 08:38 J	1708874.74	1708874.86	1708874.99	0.0072	0.0032
Mercury	-35-11-20 09:35 J	1708962.77	1708962.90	1708963.04	0.0072	0.0023
Mercury	-34-02-16 10:33 J	1709050.80	1709050.94	1709051.08	0.0072	0.0014

Mercury	-34-05-15 11:31 J	1709138.84	1709138.98	1709139.12	0.0072	0.0005
Mercury	-34-08-11 12:28 J	1709226.88	1709227.02	1709227.16	0.0072	0.0004
Mercury	-34-11-07 13:26 J	1709314.92	1709315.06	1709315.20	0.0073	0.0013
Mercury	-33-02-03 14:24 J	1709402.97	1709403.10	1709403.24	0.0073	0.0023
Mercury	-33-05-01 15:21 J	1709491.01	1709491.14	1709491.27	0.0073	0.0032
Mercury	-33-07-28 16:04 J	1709579.07	1709579.17	1709579.30	0.0073	0.0042
Mercury	-33-10-24 17:16 J	1709667.13	1709667.22	1709667.33	0.0073	0.0051
Mercury	-32-01-20 18:14 J	1709755.19	1709755.26	1709755.35	0.0073	0.0061
Mercury	-32-04-18 19:26 J	1709843.28	1709843.31	1709843.35	0.0073	0.0071